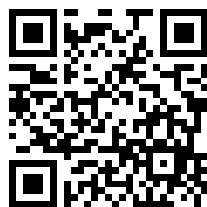

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The JOURNAL of the UNITED SERVICE Institution of INDIA

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ALL officers of the Royal Navy, Army, Royal Air Force, Colonial Forces, and of the Auxiliary Force, India, and Gazetted Government Officers shall be entitled to become members without ballot, on payment of the entrance fee and annual subscription.

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Sergeants' Messes and Regimental Libraries, Reading and Recreation Rooms shall be permitted to obtain the Journal on payment of an annual subscription of Rs. 10.

If a member fails to pay his subscription for any financial year (ending 31st December) before the 1st June in the following year, a registered notice shall be sent to him by the Secretary inviting his attention to the fact. If the subscription is not paid by 1st January following his name shall be posted in the Reading Room for six months and then struck off the roll of members.

Members joining the Institution, on or after the 1st October, will not be charged subscription until the following 1st January, unless the Journals for the current year have been supplied.

Members are responsible that they keep the Secretary carefully posted in regard to changes of rank and address. Duplicate copies of the Journal will not be supplied free to members when the original has been posted to a member's last known address, and not been returned by the post.

All communications shall be addressed to the Secretary, United Service Institution of India, Simla.

*Rs. 7 in the case of British Service Officers serving in India.

Contributions to the Journal.

All papers must be typewritten (in duplicate) and only on one side of the paper. All proper names, countries, towns, rivers, etc., must be in capital letters. All plans must have a scale on them.

Contributors are responsible, when they send articles containing any information which they have obtained by virtue of their official positions, that they have complied with the provisions of A. R. I., para. 204, and King's Regulations, para. 509.

Anonymous contributions under a *non-de-guerre* will not be accepted or acknowledged; all contributions must be sent to the Secretary under the name of the writer and the paper will, if accepted, be published under that name unless a wish is expressed for it to be published under a *non-de-guerre*. The Executive Committee will decide whether the wish can be complied with.

The Committee reserve to themselves the right of omitting any matter which they consider objectionable. Articles are only accepted on these conditions.

The Committee do not undertake to authorise the publication of such papers as are accepted in the order in which they may have been received.

Contributors will be supplied with three copies of their paper *gratis*, if published.

Manuscripts of original papers sent for publication in the Journal will not be returned to the contributor, unless he expresses a wish to have them back and pays the postage.

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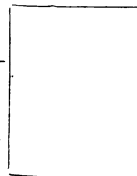
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2. Officers wishing to become members of the United Service Institution of India should apply to the Secretary. The rules of membership are printed inside front cover.

3. The Reading Room of the Institution is provided with all the leading illustrated papers, newspapers, magazines, and journals of military interest that are published.

4. There is a well-stocked library in the Institution, from which members can obtain books on loan free. Books are sent out to members V.-P. for the postage.

5. The Institution publishes a Quarterly Journal in the months of January, April, July and October which is issued postage free to members in any part of the world.

6. Members and the public are invited to contribute articles to the Journal of the Institution for which honoraria will be awarded by the Executive Committee. Rules for the guidance of contributors will be found in para. IV, Secretary's Notes.

7. Members are responsible that they keep the Secretary carefully posted with regard to changes of address.

8. When temporarily in the U. K., Officers of the Indian Army can join the Royal United Service Institution, Whitehall, for a period of six months on payment of half a guinea, or for a period of one year on payment of a guinea.

United Service Institution of India.

JANUARY, 1929.

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I.—New Members.

The following new members joined the Institution from 1st November to 31st December 1928 :—

LIFE MEMBER.

Lieut. G. M. Stewart.

ORDINARY MEMBERS.

Captain A. Fortescue.

Captain K. W. Brand.

Major-General B. F. Burnett-Hitchcock.

Captain H. S. Howarth.

Captain C. Gilbert.

II.—Examinations.

(a) The following table shows the campaigns on which the military history papers will be set from March, 1929, for lieutenants for promotion to captain in sub-head (b) (iii) and for captains for promotion to major in sub-head (d) (iii) :—

Serial No.	1	2	3	4	5
		Date of examination.	Campaign set for the first time.	Campaign set for the second time.	Campaign set of the last time.
1	March, 1929 ..	..	..	Palestine, 1917-18 (as given in serial 2, column 3).	Waterloo, 1915 (as given in serial 1s column 3).
2	October, 1929 ..	Egypt and Palestine, from the outbreak of war with Germany to June 1917.	..	..	Palestine, 1917-18 (as given in serial 2, column 3).

NOTE.—With regard to Army Order 363 of 1926, the above campaigns will not be divided into general and special periods.

(b) Books on military history and languages with dictionaries are available in the Library. The following list of books may be found useful for reference by officers studying for Promotion Examinations or entrance to the Staff College :—

(The list of books presented and purchased as shown in the Journal should also be consulted).

MILITARY HISTORY.

1.—*The Campaign of the British Army in France and Belgium.*

A.—OFFICIAL HISTORY OF THE WAR.

Military Operations, France and Belgium, Vol. I (to October, 1914).

Military Operations, France and Belgium, Vol. II (to 20th November, 1914).

Sir John French's Despatches.

B.—OTHER BOOKS.

40 days in 1914 (General Maurice, new edition).

1914 (Viscount French).

My War Memories (Ludendorff).

General Headquarters, 1914-16, and its Critical Decisions (Falkenhayn).

The March on Paris, 1914 (Von Kluck).

Ypres, 1914. (An official account) (German General Staff).

Oxford Pamphlets, August 1914. The Coming of the War. (Spencer Wilkinson).

Oxford Pamphlets, August 1914, Nos. VII and X.

Times Documentary History of the War, Vol. V, Military, Part I.

Times Documentary History of the War, Vol. VIII, Part III.

Der Grobe Krieg : Die Schlacht bei Mons (German General Staff).

Der Grobe Krieg : Die Schlacht bei Longwy (German General Staff).

Story of the Fourth Army (Montgomery).

2.—*The Palestine Campaign.*

A.—OFFICIAL ACCOUNTS.

A Brief Record of the Advance of the Egyptian Expeditionary Force, 1919.

The Australian Imperial Force in Sinai and Palestine (H. S. Gullett).

The New Zealanders in Sinai and Palestine (Lieut.-Col. C. G. Powels).

B.—OTHER BOOKS.

- Soldiers and Statesmen (Field-Marshal Sir W. Robertson).
 The Revolt in the Desert (T. E. Lawrence).
 Allenby's Final Triumph (W. T. Massey).
 How Jerusalem was Won (W. T. Massey).
 Outline of the Egyptian and Palestine Campaigns, 1914-18
 (Bowman-Manifold).
 L'Attaque du Canal de Suez (Douin).
 Army Quarterly—October 1920 (T. E. Lawrence's article).
 Army Quarterly—January 1922 (Lieut.-Colonel Wavell and C. T.
 Atkinson's articles).
 Cavalry Journal—October 1921 (Lieut.-Colonel Rex Osborne's
 article).
 Cavalry Journal—July 1923 (Lieut.-Colonel Beston's article).
 R. U. S. I. Journal—May 1922 (Colonel-Commandant Weir's
 article).
 U. S. I. Journal—October 1923 (Captain Channer's article).

3.—The Dardanelles Campaign.*Description*

- | | |
|---|--|
| Naval and Military Despatches .. | A clear account of the operations in detail from the G. H. Q. standpoint. |
| Reports of the Dardanelles Commission. | Fixes responsibility for the inception and conduct of the campaign. An interesting study in the relationship between Politicians and Naval and Military Experts. |
| The Dardanelles (Callwell) .. | The best account and criticism of the strategic conduct of the campaign. |
| Gallipoli Diary (Sir I. Hamilton) .. | The campaign from the point of view of the C.-in-C. on the spot. |
| Life of Lord Kitchener (Arthur) .. | Throws considerable light on Lord Kitchener's direction of the campaign. |
| The Dardanelles Campaign }
(Nevinson).
Gallipoli (Masefield)
The World Crisis (Winston Churchill.) | Well written and picturesque accounts by eye-witnesses.
Explains his part in inception of the campaign. |

NOTE.—For a fuller list of authorities, see Appendix I to Callwell's "The Dardanelles."

- Soldiers and Statesmen (Field-Marshal Sir W. Robertson). From point of view of the Five years in Turkey (Liman Van C. I. G. S. Sanders).
- Official Account: Official History of the War, Naval Operations, Vols. II and III.
- Gallipoli Campaign (Outline of Military Operations). By a Student.
- Experiences of a Dugout (Callwell).
- Despatches from the Dardanelles (Ian Hamilton).
- The Navy in the Dardanelles Campaign (Wemyss).

4.—The Mesopotamia Campaign.

- The Campaign in Mesopotamia, 1914-18 (Evans).
- Official History of the Campaign in Mesopotamia, Vol. IV (F. J. Moberly).
- Critical Study of the Campaign in Mesopotamia up to April, 1917.
- Soldiers and Statesmen (Field-Marshal Sir W. Robertson).
- The World Crisis (Winston Churchill).
- Notes and Lectures on the Campaign in Mesopotamia (A. Kearsay).

5.—Waterloo Campaign.

- Waterloo Campaign (J. H. Anderson).
- Waterloo (Hilaire Belloc).
- Wellington and Waterloo (Arthur Griffiths).
- Waterloo the Downfall of the first Napoleon (George Hooper).
- Campaign of 1815 (W. H. James).
- With Napoleon at Waterloo (E. B. Low).
- Campaign of 1815, Ligny: Quatre-Bras: Waterloo (W. O'Connor Morris).
- Waterloo Campaign (S. C. Pratt).
- Wellington and Waterloo (G. W. Redway).
- Wellington Campaigns. Peninsula-Waterloo, 1803-1815, also Moore's.
- Campaign of Corunna (C. W. Robinson).

6.—*The American Civil War.*

Stonewall Jackson and the American Civil War (G. F. R. Henderson).

History of the Civil War in the United States, 1861-65 (W. B. Wood and J. E. Edmonds).

History of the Campaign of Gen. T. J. (Stonewall) Jackson in the Shenandoah Valley of Virginia (William Allen).

American Civil War (J. H. Anderson).

The 1st American Civil War, 1775-78 (Henry Belcher).

The American Civil War, 1861-64 (John Formby).

History of the American Civil War (J. W. Draper).

Fredericksburg and Chancellorsville (J. E. Gough).

Battles and Leaders of the Civil War (Johnson and Buel).

War of Secession, 1861-62 (G. W. Redway).

7.—*The East Prussian Campaign.*

Tannenberg—First 30 days in East Prussia (Edmond Ironside).

8.—*The Russo-Japanese War, 1904, up to and including the Battle of Liao-Yang.*

A Staff Officer's Scrapbook (Ian Hamilton).

German Official Account.

Lectures on the Strategy of the Russo-Japanese War (Bird).

Question on the Russo-Japanese War (Brunker).

Official Account: The Russo-Japanese War (Naval and Military), 3 Vols., published by Committee of Imperial Defence.

Outline of the Russo-Japanese War (Ross).

A Study of the Russo-Japanese War (Chasseur).

My Experiences at Nan Shan and Port Arthur (Tretyakow).

Outline History of the Russo-Japanese War, 1904, up to the Battle of Liao-Yang, with Questions and Answers (P. W.).

A Short Account of the Russo-Japanese War ("Footslogger").

An account of the Battle of Liao-Yang (with questions and 10 maps for examination purposes) (Bird).

9.—*The Palestine Campaign.*

The Official History of the Great War—Military Operations in Egypt and Palestine, Vol. I, and Maps (Lt.-General Sir George MacMunn and Captain Cyril Falls).

The Palestine Campaign (Colonel A. P. Wavell).

An Outline of the Egyptian and Palestine Campaigns, 1914-18 (Major-General Sir M. G. E. Bowman-Manifold).

Official History of Australia in the War, 1914-18, Vol. VII, Sinai and Palestine (H. S. Gullett).

The Desert Campaign (W. T. Massey).

10.—*Organization of Army since 1868.*

A.—ORGANIZATION OF ARMY SINCE 1868.

History of British Army, by Fortescue, Vols. I to XI.

Outline of the Development of British Army, by Major-Genl. Sir W. H. Anderson.

Our Fighting Services, by Sir Evelyn Wood.

B.—FORCES OF THE EMPIRE.

The annual Army Estimates of Effective and Non-Effective Services (H. M. Stationery Office.)

* Notes on the land forces of the British Dominions, Colonies, Protectorates and Mandated Territories, 1925.

The Statesman's Year Book.

Army List.

Articles in Newspapers and Magazines, *viz.*, R. U. S. I.,

Army Quarterly, Journal of the U. S. I. of India, etc.

11.—*Development and Constitution of the British Empire.*

A.—THE BRITISH EMPIRE.

Encyclopædia Britannica—(contains much concentrated information).

The Statesman's Year Book.

Whitaker's Almanack.

The Colonial Office List.

The Government of the British Empire (Jenks, 1923).

The Foundation and Growth of the British Empire (J. A. Williamson, 1918).

The Beginnings of English Overseas Enterprise (Sir C. P. Lucas, 1917).

The British Empire Series. (XII Volumes).

The Government of England (L. A. Lowell, 1912).

The Expansion of the British Empire (W. H. Woodward, 1921 and 1924 edition).

Overseas Britain (E. F. Knight, 1907).

The Origin and Growth of the English Colonies and of Their System of Government (H. E. Egerton, 1903).

A Short History of Politics (Jenks, 1900).

The English Constitution (Bagehot, 1909).

The Expansion of England (Sir J. Seely, 1883).

Introduction of the Study of the Law of the Constitution (A. V. Dicey, 1908).

England in the Seven Years' War (Sir J. Corbett, 1907).

Selected Speeches and Documents on British Colonial Policy, 2 Vols. (A. B. Keith, 1918).

* Particularly recommended by the C. I. G. S. for all officers to read.

- Forty-one Years in India (Lord Roberts).
 History of the British Army (Sir John Fortescue).
 General Survey of the History of India. (Sir Verney Lovett).
 Citizenship in India (Capt. P. S. Cannon).
 India in 1926-27. (J. Coatman).
 India (Nations of to-day Series). (Sir Verney Lovett).
- B.—BOOKS ON SPECIAL PORTIONS OF THE EMPIRE OR WORLD.**
 The Rise and Expansion of British Dominions in India (Sir A. C. Lyall, 1894).
 A Brief History of the Indian Peoples (Sir W. H. Hunter, 1907).
 The Nearer East (Hogarth, 1902).
 Modern Egypt (Cromer, 1908).
 Egypt and the Army (Elgood, 1924).
 The History of Canada (W. L. Grant).
 Nova Scotia (B. Wilson, 1911).
 Report on British North America (Sir C. P. Lucas).
 The Union of South Africa (R. H. Brand, 1909).
 Short History of Australia (E. Scot).
 History of the Australasian Colonies (Jenks, 1912).
 The English in the West Indies (J. A. Froude, 1888).
 The Lost Possessions of England (W. F. Lord, 1896).
 International Relations of the Chinese Empire (H. B. Mosse).
 (Kelly and Walsh, Shanghai).
 Whats Wrong with China (Gilbert).
 Why China Sees Red (Putman-Weale).
 Napoleon's Campaigns in Italy (Lieut.-Col. R. G. Burton).
 12.—*Military Geography*.
 Naval and Military Geography of the British Empire (Dr. Vaughan Cornish, 1916).
 Imperial Military Geography (Capt. D. H. Cole, 1928).
 Introduction of Military Geography (Col. E. S. May).
 Imperial Defence (Col. E. S. May).
 Main Feature of the Japanese and other Pacific Problems.
 (Reprinted from *Morning Post*. Sifton Præd).
 Britain and the British Seas (H. J. Makinder, 1907).
 Military Geography (Macguire).
 Imperial Strategy (Repington).
 War and the Empire (H. Foster).
 Historical Geography of British Colonies (Dominions), 7 Vols.
 (Sir C. P. Lucas, 1906-17)—
 Vol. 1, Mediterranean.
 Vol. 2, West Indies.
 Vol. 3, West Africa.
 Vol. 4, South Africa.
 Vol. 5, Canada.
 Vol. 6, Australia.
 Vol. 7, India.

The Influence of Sea Power on History (A. T. Mahan, 1890).
 Historical Geography of the British Empire (Hereford George).
 The Mastery of the Pacific (A. R. Colquhoun, 1902).
 Frontiers (C. B. Fawcett, 1918).

13.—*Foreign Armies.*

OFFICIAL.

- * Handbook of the United States Army, 1924.
- * Handbook of the Army of the Netherlands, 1922.
- * Handbook of the French Army, 1925.
- * Handbook of the Belgian Army, 1926.
- * Handbook of the Polish Army, 1927.
- * Handbook of the Army of the Kingdom of Serbs-Croats and Slovenes (Yugo-Slavia) 1927.
- * Handbook of the Czechoslovak Army 1927.
- * Handbook of the Swiss Army 1924.
- * Handbook of the German Army 1928.

14.—*Tactical.*

Common mistakes in the solution of tactical problems and how to avoid them (Lieut.-Colonel A. B. Beauman, 1926).

Historical illustrations to Field Service Regulations, Vol. II (Major E. G. Eady, 1926).

Elementary Tactics or the Art of War, British School (Major R. P. Pakenham-Walsh, 1926).

III.—Payment for Articles in the Journals.

Articles accepted for publication in the Journal are paid for, and a sum of approximately Rs. 500 is awarded for articles and reviews published in each Quarterly Journal.

IV.—Contributions to the Journal.

Articles submitted for publication must be typed in *duplicate*. With reference to Regulations for the Army in India, paragraph 204 and King's Regulations, paragraph 509, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Committee.

Instructions for the preparation of drawings and plans for reproduction by lithography.

These should be in *jet* black. No washes or ribands of colour should on any account be used.

If it is absolutely necessary to use colour (and these are only permissible in line work or names) the following will reproduce photographically, *i. e.* :—

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*NOT to be removed from the Library.

V.—Library Rules.

1. The Library is only open to members and honorary members of the United Service Institution of India. Members are requested to look upon books as not transferable to their friends.

2. No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

3. The United Service Institution of India is open all the year round—including Sundays—from 9 A.M. until sunset. Books may be taken out at any time provided Rule 2 is complied with.

4. A member shall not be allowed, at one time, more than three books or sets of books.

5. Papers, magazines, "works of reference" or books marked "Not to be Taken Away," or noted as "Confidential" may not be removed.

6. No particular limit is set as to the number of days for which a member in Simla may keep a book, the Council being desirous of making the library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member it will be re-called.

7. Applications for books from members at out-stations are dealt with as early as possible, and books are despatched per Registered V. P. P. They must be returned carefully packed per Registered Parcel Post within one month of date of issue.

8. If a book is not returned at the end of one month, it must be paid for without the option of return, if so required by the Executive Committee.

9. Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print the value shall be fixed by the Executive Committee, and the amount, when received, spent in the purchase of a new book.

10. The issue of a book under these rules to any member implies the latter's compliance with the rules, and the willingness to have them enforced, if necessary, against him.

11. A list of all books presented and purchased, and also a list of books useful to members studying for the Staff College and Promotion Examinations, will be found under Secretary's Notes in the quarterly issue of the U. S. I. Journal.

12. Members are invited to contribute presents of books, maps and photographs of naval and military interest. These may be addressed to the Secretary, U. S. I. of India, Simla. They will be duly acknowledged.

VI.—Library Catalogue.

The catalogue is completed to 31st March 1924. Price Rs. 3-8-0 or postage paid Rs. 3-14-0. An addendum completed up to 30th September 1927 is now available. Price As. 8 plus postage As. 4.

VII.—Army List Pages.

The U. S. I. is prepared to supply members and units with manuscript or type-written copies of Indian Army List pages, at the rate of Rs. 2 per manuscript or type-written page.

VIII.—

BOOKS PRESENTED.

- | <i>Title.</i> | <i>Published.</i> | <i>Author.</i> |
|---|-------------------|-------------------------------------|
| 1. Shikar-Tales by a Sportsman in India. | 1928. | Lt.-Col. C. H. Stockley. |
| (Presented by the Oxford University Press, Bombay.) | | |
| 2. Official History of Australia in the War 1914-18. Royal Australian Navy Vol. IX. | 1928. | A. W. Jones. |
| (Presented by Messrs. Angus & Robertson Ltd., Sydney.) | | |
| 3. Hodsons Horse. (4th D. C. O. Lancers.) | 1928. | Major F. G. Cardew. |
| (Presented by Messrs. W. Blackwood & Sons, Ltd., London.) | | |
| 4. First Class Polo-Tactics & Match Play. | 1928. | Brig.-Genl. R. L. Ricketts. |
| (Presented by Messrs. Gale and Polden, Ltd., Aldershot). | | |
| 5. Punjab Administration Report 1926-27. | 1928. | .. |
| (Presented by the Superintendent, Government Printing, Punjab, Lahore). | | |
| 6. Army Mathematics | .. 1928. | C. Jennings and R. R. L. W. Tobutt. |
| (Presented by the Oxford University Press, Bombay.) | | |
| 7. The East Yorkshire Regiment in the Great War 1914-18. | 1928. | Everard Wyrall. |
| (Presented by Messrs. Harrison and Sons, Ltd., London.) | | |

V.—Library Rules.

1. The Library is only open to members and honorary members of the United Service Institution of India. Members are requested to look upon books as not transferable to their friends.

2. No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

3. The United Service Institution of India is open all the year round—including Sundays—from 9 A.M. until sunset. Books may be taken out at any time provided Rule 2 is complied with.

4. A member shall not be allowed, at one time, more than one book or sets of books.

5. Papers, magazines, "works of reference" or books marked "Not to be Taken Away," or noted as "Confidential," are not to be removed.

6. No particular limit is set as to the number of books a member in Simla may keep a book, the Council being desirous of keeping the library as useful as possible to members; but a book must be returned of a fortnight from date of issue it is required to be returned will be re-called.

7. Applications for books from members should be made as early as possible, and books are to be returned by V. P. P. They must be returned carefully by Registered Parcel Post within one month of date of issue.

8. If a book is not returned at the end of the month it may be paid for without the option of return. The Committee.

9. Lost and defaced books must be replaced by the member to whom they were issued. If a book is lost or is out of print the value shall be paid and the amount, when received, shall be credited to the member.

10. The issue of a book to a member implies the latter's compliance with the rules, which are enforced, if necessary, by the Committee.

11. A list of all books issued to members for examination purposes, will be published quarterly in the U. S. I. Journal.

VI.—Library Catalogue.

VII.—Army List Pages	of a Division (suit-	Rs. 2
The H. C. List	Promotion)	..

VIII.— Mountain Warfare .. „ 3
(*Reprinted May, 1928*). Complete with

- Digitized by Google

BOOKS PURCHASED.

<i>Title.</i>	<i>Published.</i>	<i>Author.</i>
1. On the Court and Off	..	A. F. Wilding.
2. Earl Haig	..	Ernest Protheroe.
3. Lord Reading	..1928.	C. J. C. Street.
4. Lord Haig	..1928.	Sir George Arthur.
5. Official History of the War in the Air, Vol. II.	..1928.	H. A. Jones.
6. Falsehood in War Time	..1928.	A. Ponsonby.
7. British Documents on the Origins of the War, 1898-1914, Vols. I, II, III and XI.	1926 to 1928.	Gooch and Temperley.
8. The Memoirs of Prince Max of Baden, Vols. I and II.	1928.	
9. Life of Lord Curzon, Vol. III	..1928.	Earl of Ronaldshay.
10. The British Campaigns in Europe 1914-18.	..1928.	Sir · Arthur Conan Doyle.
11. China in Turmoil	..1927.	L. M. King.
12. Lord Cardwell at the War Office	..1904.	Sir Robert Biddulph.
13. Whitaker's Almanack	..1929.	..

BOOKS ON ORDER.

1. The Murmansk Venture	..	Major-General Sir C. Maynard.
2. Rulers of the Indian Ocean	..	Admiral Ballard.
3. Official History of the Great War.. Military Operations, France and Belgium 1914, Vol. IV.		J. E. Edmonds.
4. The Story of the North Sea Air.. Station.		C. F. Snowden-Gamble.
5. European Skyways	..	Thomas Lowell.

IX.—Famphlets.

The following may be obtained by V. P. P., plus postage, on application to the Secretary:—

- (a) British and Indian Road Space Tables (separately), As. 12 each.
- (b) Diagram of Ammunition Supply (India), As. 4.
- (c) Diagram showing New System of Maintenance in the Field at Home, As. 8.
- (d) Military Law Paper, Questions and Answers, As. 4. (As used at the A. H. Q. Staff College Course, 1926).

X.—Schemes.

The schemes in the Institution have been considerably increased and in order to simplify their issue they have been classified and numbered as follows :—

They can all be obtained by V. P. P., plus postage, on application to the Secretary.

(A) Administrative Exercise, with diagram (Reprinted May, 1928).

To illustrate the supply system of a Division (suitable for Staff College or Promotion) .. Rs. 2

(B) Mountain Warfare (Reprinted May, 1928).

(i) A scheme complete with map and solution .. , 5

(ii) Three Lectures on Mountain Warfare .. , 3

(C) New Staff College Series (Reprinted May, 1928). Complete with maps and solutions :—**(i) Approach March.**

Reconnaissance of night attack.

Orders for night attack Rs. 5

(ii) Outposts.

Defence.

Action of a Force Retiring , 5

(iii) Move by M. T.

Occupation of a defensive position.

Counter-attack , 5

(D) Promotion Series (Reprinted May, 1928). Complete with maps and solutions.**Lieutenant to Captain—**

(i) Mountain Warfare Rs. 5

(ii) Defence.

Attack orders , 5

Captain to Major—**(i) Outposts.**

Defensive position.

Withdrawal , 5

(ii) Tactical Exercise without troops.

Reconnaissance.

Attack orders , 5

(E) Course of five lectures given at the London School of Economics, 1925, on "Transportation in War." As. 12.**(F) Copies of the recent (February 1928) Staff College Examination papers are available :—**

Strategy and Tactics Papers with Maps .. Rs. 2 each.

Other papers , 1 each.

(G) Staff College Course Schemes (1928) :—

- (i) A set of three schemes, as given at the Army Headquarter Staff College Course, 1928, complete with maps and solutions, complete set .. Rs. 9

A limited number of the following papers are available :—

- (ii) Supply Problem (with map and answers) .. Rs. 2 each
 (iii) Military Law Paper (with answers) .. As. 8 „
 (iv) Organization and Administration—Peace (with notes for replies) .. „ 8 „
 (v) Precis of lecture on Organization and Administration .. „ 8 „
 (vi) Hints on Working for the Examination and on tackling the Tactical Papers .. „ 8 „
 (vii) Lecture on Military Law III—Precis .. „ 8 „
 (viii) Precis of Lecture on Reinforcements in War .. „ 8 „
 (ix) Precis of Lecture on Night Operations .. „ 8 „
 (x) Precis of Lecture on Bush Warfare .. „ 4 „
 (xi) Precis of Lecture on East Prussian Campaign, 1914—(I.—Battle of Tannenberg) .. As. 8 „
 (xii) Precis of Lecture on East Prussian Campaign, 1914—(II.—The Battle of the Masurian Lakes ; and General Lessons) .. „ 8 „
 (xiii) Lecture on R. A. F. Organization and General Employment .. „ 8 „
 (xiv) Lecture on R. A. F. Co-operation with the Army .. „ 8 „
 (xv) Precis of Lecture on the Employment of Cavalry with a Brigade of all Arms .. „ 8 „
 (xvi) Precis of Two Lectures on the Organization of the British Army .. „ 8 „
 (xvii) Precis of Lecture on Ordnance Services with Special Reference to Movement on Transportation .. „ 8 „
 (xviii) Precis of Lecture on the Dominion Forces .. „ 8 „
 (xix) Precis of Lecture on the Armoured Force .. „ 8 „
 (xx) Precis of Lecture on the Auxiliary and Indian Territorial Forces .. „ 8 „
 (xxi) Precis of Lecture on the Artillery Organization .. „ 8 „

Efforts are being made to compete with demands for tactical schemes from officers working for the Staff College and Promotion Examinations by introducing as many new schemes as possible.

It is obviously impossible for the Secretary to undertake the correction of individual solutions, but all the recent schemes include a suggested solution in the form in which it is considered that the paper should have been answered with reasons for the solution given.

Officers are recommended to work all their schemes against time and to get into the habit of the methodical allotment of time to the various questions asked.

XI.—Gold Medal Prize Essay Competition, 1929.

The Council has chosen the following alternative subjects for the Gold Medal Prize Essay for 1929 :—

(i) In future campaigns on the frontier we may encounter tribesmen, either equipped themselves with, or supported by other troops possessing modern artillery and aircraft. How can we best, both on the march and in bivouac, combine protective measures to safeguard ourselves against tribal tactics, as we have known them in the past, supported by such modern weapons,

or

(ii) Outline the best method of supplying a combined mechanised ground force and air force operating at a considerable distance (150—250 miles) from a railhead with no metalled road communications, no local mechanical or petrol facilities, and practically no local supplies except water.

The following are the conditions of the competition :—

(1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army and Royal Air Force or Auxiliary Forces, who are members of the U. S. I. of India.

(2) Essays must be printed or type-written and submitted in triplicate.

(3) When a reference is made to any work, the title of such work is to be quoted.

(4) Essays are to be strictly anonymous. Each must have a motto and, enclosed with the essay, there should be sent a sealed envelope with the motto written on the outside and the name of the competitor inside.

(5) Essays will not be accepted unless received by the Secretary on or before the 30th June 1929.

(6) Essays will be submitted for adjudication to the three Judges chosen by the Council. The Judges may recommend a money award, not exceeding Rs. 150, either in addition to or in substitution of the medal. The decisions of the three Judges will be submitted to the Council, who will decide whether the medal is to be awarded and whether the essay is to be published.

(7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1929.

(8) All essays submitted are to become the property of the United Service Institution of India absolutely and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.

(9) Essays should not exceed 15 pages of the size and style of the Journal exclusive of any appendices, tables or maps.

By order of the Council.

J. G. SMYTH, MAJOR,

*Secretary, United Service Institution of
India.*

Simla 1st January 1929.

Prize Essay Gold Medallists.

(With Rank of Officers at the date of the Essay).

- 1872..ROBERTS, Lieut.-Col. F. S., v.C., C.B., R.A.
 1873..COLQUHOUN, Capt. J. S., R.A.
 1874..COLQUHOUN, Capt. J. S., R.A.
 1879..ST. JOHN, Maj., O.B.C., R.E.
 1880..BARROW, Lieut. E. G., 7th Bengal Infantry.
 1882..MASON, Lieut. A. H., R.E.
 1883..COLLEN, Maj. E. H. H., s.c.
 1884..BARROW, Capt. E. G., 7th Bengal Infantry.
 1887..YATE, Lieut. A. C., 27th Baluch Infantry.
 1888..MAUDE, Capt. F. N., R.E.
 YOUNG, Maj. G. F., 24th Punjab Infantry (specially awarded a silver medal).
 1889..DUFF, Capt. B., 9th Bengal Infantry.
 1890..MAGUIRE, Capt. C. M., 2nd Cavy. Hyderabad Contingent.
 1891..CARDEW, Lieut. F. G., 10th Bengal Lancers.
 1893..BULLOCK, Maj. G. M., Devonshire Regiment.
 1894..CARTER, Capt. F. C., Northumberland Fusiliers.
 1895..NEVILLE, Lieut.-Col. J. P. C., 14th Bengal Lancers.
 1896..BINGLEY, Capt. A. H., 7th Bengal Infantry.
 1897..NAPIER, Capt. G. S. F., Oxfordshire Light Infantry.
 1898..MULLALLY, Maj. H., R.E.
 CLAY, Capt. C. H., 43rd Gurkha Rifles (specially awarded a silver Medal).
 1899..NEVILLE, Col. J. P. C., s.c.
 1900..THUILLIER, Capt. H. F., R.E.
 LUBBOCK, Capt. G., R.E. (specially awarded a silver medal).
 1901..RANKEN, Lieut.-Col. G. P. P., 46th Punjab Infantry.
 1902..TURNER, Capt. H. H. F., 2nd Bengal Lancers.
 1903..HAMILTON, Maj. W. G., d.s.o., Norfolk Regiment.
 BOND, Capt. R. F. G., R.E. (specially awarded a silver medal).
 1904..MACMUNN, Maj. G. F., d.s.o., R.F.A.
 1905..COCKERILL, Maj. G. K., Royal Warwickshire Regiment.
 1907..WOOD, Maj. E. G. M., 99th Deccan Infantry.
 1908..JEUDWINE, Maj. H. S., R.A.
 1909..MOLYNEUX, Maj. E. M. J., d.s.o., 12th Cavalry.
 ELSMIE, Maj. A. M. S., 56th Rifles, F. F. (specially awarded a Silver medal).
 1911..MR. D. PETRIE, M.A., Punjab Police.
 1912..CARTER, Maj. B. C., The King's Regiment.
 1913..THOMSON, Maj. A. G., 58th Vaughan's Rifles (F. F.).
 1914..BAINBRIDGE, Lieut.-Col. W. F., d.s.o., 51st Sikhs (F. F.).
 NORMAN, Maj. C. L., m.v.o., Q.V.O. Corps of Guides (specially awarded a silver medal).
 1916..CRUM, Maj. W. E., v.D., Calcutta Light Horse.
 1917..BLAKER, Maj. W. F., R.F.A.
 1918..GOMPERTZ, Capt. A. V., m.c., R.E.
 1919..GOMPERTZ, Capt. M. L. A., 108th Infantry.
 1920..KEEN, Lt.-Col. F. S., d.s.o., 2/15th Sikhs.
 1922..MARTIN, Maj. H. G., d.s.o., o.B.E., R.F.A.
 1923..KEEN, Colonel F. S., d.s.o., I.A.
 1926..DENNY'S Major L. E., m.c., 4/12th Frontier Force Regiment.
 1927..HOGG, Major D. Mc. A., m.c., R.E.
 1928..FRANKS, Major K. F., d.s.o., 5th Royal Mahrattas.

MACGREGOR MEMORIAL MEDALS.

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June :—

(a) For officers—British or Indian—silver medal.

(b) For soldiers—British or Indian—silver medal, with Rs. 100 gratuity.

3. For specially valuable work a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for special good work.

4. The award of medals is made by His Excellency the Commander-in-Chief, as Vice-Patron, and the Council of the United Service Institution who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.†

Note.

(i) Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

(ii) When the work of the year has either not been of sufficient value or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

MacGregor Memorial Medallists.

(With rank of officers and soldiers at the date of the Award.)

1889..BELL, Col. M. S., v.o., R.E. (specially awarded a gold medal).

1890..YOUNGHUSBAND, Capt. F. E., King's Dragoon Guards.

* *N. B.*—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Indian Auxiliary and Territorial Forces and Corps under Local Governments, Frontier Militia, Levies and Military Police, also all ranks serving in the Indian State Forces.

† Replacements of the M. M. ribbon may be obtained on payment from the Secretary, U. S. I., Simla.

MacGregor Memorial Medallists—(contd.).

- 1891..SAWYER, Major H. A., 45th Sikhs.
RAMZAN KHAN, Havildar, 3rd Sikhs.
- 1892..VAUGHAN, Capt. H. B., 7th Bengal Infantry.
JAGGAT SINGH, Havildar, 19th Punjab Infantry.
- 1893..BOWER, Capt. H., 17th Bengal Cavalry (especially awarded a gold medal).
FAZALDAD KHAN, Dafedar, 17th Bengal Cavalry.
- 1894..O'SULLIVAN, Major G. H. W., R.E.
MULL SINGH, Sowar, 6th Bengal Cavalry.
- 1895..DAVIES, Capt. H. R., Oxfordshire Light Infantry.
GANGA DYAL SINGH, Havildar, 2nd Rajputs.
- 1896..COCKERILL, Lieut. G. K., 28th Punjab Infantry.
GHULAM NABI, Sepoy, Q. O. Corps of Guides.
- 1897..SWAYNE, Capt. E. J. F., 10th Rajput Infantry.
SHAHZAD MIR, Dafedar, 11th Bengal Lancers.
- 1898..WALKER, Capt. H. B., Duke of Cornwall's Light Infantry.
ADAM KHAN, Havildar, Q. O. Corps of Guides.
- 1899..DOUGLAS, Capt. J. A., 2nd Bengal Lancers.
MIHR DIN, Naik, Bengal Sappers and Miners.
- 1900..WINGATE, Capt. A. W. S., 14th Bengal Lancers.
GURDIT SINGH, Havildar, 45th Sikhs.
- 1901..BURTON, Maj. E. B., 17th Bengal Lancers.
SUNDAR SINGH, Colour Havildar, 31st Burmah Infantry.
- 1902..RAY, Capt. M. R. E., 7th Rajput Infantry.
TILBIR BHANDARI, Havildar, 9th Gurkha Rifles.
- 1903..MANIFOLD, Lieut.-Col. C. C., I.M.S.
GHULAM HUSSAIN, Lance-Dafedar, Q. O. Corps of Guides.
- 1904..FRASER, Capt. L. D., R.G.A.
MOGHAL BAZ, Dafedar, Q. O. Corps of Guides.
- 1905..RENNICK, Maj. F., 40th Pathans (specially awarded a gold medal).
MADHO RAM, Havildar, 8th Gurkha Rifles.
- 1906..SHAHZADA AHMAD MIR, Risaldar, 36th Jacob's Horse.
GHAFUR SHAH, Lance-Naik, Q. O. Corps of Guides Infantry.
- 1907..NANGLE, Capt. M. C., 92nd Punjabis.
SHEIKH USMAN, Havildar, 103rd Mahratta Light Infantry.
- 1908..GIBBON, Capt. C. M., Royal Irish Fusiliers.
MALANG, Havildar, 56th Punjab Rifles.
- 1909..MUHAMMAD RAZA, Havildar, 106th Pioneers.

MacGregor Memorial Medallists—(*concl'd.*).

- 1910..SYKES, Maj. M. C.M.G., late 2nd Dragoon Guards (specially awarded a gold medal).
TURNER, Capt. F. G., R.E.
KHAN BAHADUR SHER JUNG, Survey of India.
- 1911..LEACHMAN, Capt. G. E., The Royal Sussex Regiment.
GURMUKH SINGH, Jemadar, 93rd Burmah Infantry.
- 1912..PRITCHARD, Capt. P. P. A., 83rd Wallahabad Light Infantry (specially awarded a gold medal).
WILSON, Lieut. A. T., C.M.G., 32nd Sikh Pioneers.
MOHIBULLA, Lance-Dafedar, Q. V. O. Corps of Guides.
- 1913..ABBAY, Capt. B. N., 27th Light Cavalry.
SIRDAR KHAN, Sowar, 39th (K. G. O.) Central India Horse.
WARATONG, Havildar, Burmah Military Police (specially awarded a silver medal).
- 1914..BAILEY, Capt. F. M., I.A. (Political Department).
MORSHEAD, Capt. H. T., R.E.
HAIDAR ALI, Naik, 106th Hazara Pioneers.
- 1915..WATERFIELD, Capt. F. C., 45th Rattray's Sikhs.
ALI JUMA, Havildar, 106th Hazara Pioneers.
- 1916..ABDUR RAHMAN, Naik, 21st Punjabis.
ZARGHUN SHAH, Havildar, 58th Rifles (F. F.) (specially awarded a silver medal).
- 1917..MIAN AFRAZ GUL, Sepoy, Khyber Rifles.
- 1918..NOEL, Capt. E. W. C. (Political Department).
- 1919..KEELING, Lt.-Col. E. H., M.C., R.E.
ALLA SA, Jemadar, N. E. Frontier Corps.
- 1920..BLACKER, Capt. L. V. S., Q. V. O. Corps of Guides.
AWAL NUR, C. Q. M. Havildar, 2nd Bn., Q. V. O. Corps of Guides. (Special gratuity of Rs. 200.)
- 1921..HOLT, Major A. L., Royal Engineers.
SHER ALI, Sepoy No. 4952, 106th Hazara Pioneers.
- 1922..ABDUL SAMAD SHAH, Capt., O.B.E., 31st D. C. O. Lancers.
NUR MUHAMMAD, Lance-Naik, 1st Guides Infantry, F. F.
- 1923..BRUCE, Capt. J. G., 2/6th Gurkha Rifles.
SOHBAT, Head Constable, N.-W. F. Police.
HARI SINGH THAPA, Survey Department.
- 1924..HAVILDAR RAHMAT SHAH, N.-W. F. Corps.
NAIK GHULAB HUSSAIN, N.-W. F. Corps.
- 1925..SPEAR, Captain C. R. 5/13th Frontier Force Rifles.
JABBAR KHAN, Naik, 5/13th Frontier Force Rifles.
- 1926..HARVEY-KELLY, Major C. H. G. H., D.S.O., 4/10th Baluch Regiment.
- 1927..LAKE, Major M. C., 4/4th Bombay Grenadiers.
- 1928..BOWERMAN, CAPTAIN J. F., 4/10th D. C. O. Baluch Regiment.
MUHAMMED KHAN, Havildar, Zhob Levy Corps.

The Journal

OF THE

United Service Institution of India.

Vol. LIX. JANUARY, 1929 No. 254.

EDITORIAL.

The Experimental Armoured Force at Tidworth, having served its purpose, is now being broken up and two smaller mechanised formations are being brought into being at Wool and Aldershot.

The decision to break up the Experimental Force has given rise in some quarters to rather violent reactionary views on the subject of the potentialities of armoured fighting vehicles generally. Such views are to be deprecated.

The War proved definitely the value of the tank and, in certain theatres, of the armoured car, and impressed on everyone the necessity for increasing our mobility and offensive power by the mechanization of transport. All our post-war training has only served to emphasize these points. There were, of course, a number of people, both soldiers and civilians, who held advanced ideas on the subject and advocated complete mechanization and entire abolition of the unarmoured soldier.

The formation of the Experimental Armoured Force at Tidworth gave rise to a flood of literature in the press and it was visited and inspected by soldiers, pressmen, politicians and innumerable people of all sorts and descriptions. It was tested, so far as anything can be tested in peace time, in many different operations, both in co-operation with other troops and acting independently, and many extremely valuable lessons were deduced from these operations.

Once, however, the necessity for unarmoured units having some form of anti-tank weapon had been firmly established, the Armoured Force, acting independently, did not have matters so much its own way and the need for co-operating cavalry and infantry was felt acutely in certain situations.

In addition to the mobility and great striking power possessed by the Force, certain unrealised weaknesses were brought to light. The amount of petrol and oil required by such a Force is enormous and the machines cannot be kept in action for long periods without complete overhaul. When acting independently an armoured force is very blind and the light tank has not yet come near to replacing cavalry for reconnaissance and protective purposes.

It is very vulnerable to artillery fire and to air attack, very reliant on suitable ground and apt to be rather helpless at night.

These disadvantages, however, should not be allowed to outweigh the great strength and decisive hitting power of such a force in the attack; they only serve to show that the best value can be obtained by using it in conjunction with the other arms for certain tasks for which it is particularly suited.

* * * * *

It was most unfortunate that heavy rain should have been experienced just at the time of this year's Northern Command Manœuvres at Jhelum. It is difficult for those who have only known rain in England to realise its paralysing effect in a flat drainless and almost roadless country like Northern India or Iraq, although those who soldiered in the latter country during the last war realised it only too well.

The mud in Flanders, especially during the awful winter of 1914-15, was a great hindrance to movement and made life distinctly unpleasant but, given the same amount of rain, the mud of the plains of India, and Iraq, would put a more complete stop to mobile operations and make the problem of supply quite a big enough one without any possibility of movement.

Manœuvres at Home frequently take place after, or during, continuous rain, but this rain is very rarely sufficient to put a complete stop to operations.

In India, however, with the great scarcity of metalled roads, quite a small amount of rain is a very serious matter and makes movement difficult if not impossible.

As it happened, this year, the rain just stopped in time and, after a 48 hours' postponement, enabled the operations to be carried on, and the difficult conditions tested the ingenuity and resource of the supply services and staff to the utmost.

The problem of feeding a division on one good metalled road is a difficult enough one in itself but, when that division leaves the main road and advances by an unmetalled one through waterlogged country and nullahs in spate, the situation has to be seen to be appreciated.

The danger from air attack also becomes greatly increased as transport is confined to the roads and concealment is extremely difficult.

On the Northern Command Manœuvres it was found that heavy wire netting, pegged down to form a roadway, proved very efficacious in getting wheeled transport, including six wheelers, over nullahs in spate. The same method but with a lighter type of wire was used a great deal in the war, especially in Palestine, to get wheeled transport through heavy sand and mud and it is understood that the R. A. F. are thinking of trying it to get machines to land and take off from muddy landing grounds which would otherwise be out of action after rain.

* * * * *

Those officers who were accommodated in the Directing Staff Camp at Serai Alamgir during the Northern Command Manœuvres could not help being struck by the smart turn out and intelligence of the boys of the King George's School.

A visit to the School will well repay anyone who is interested in the future supply of Indian Officers and King's Commissioned Indian Officers for the Indian Army. The boys acted as messengers during the manoeuvres and their keenness and intelligence was remarked on by everyone.

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The recent situation in Afghanistan has naturally caused considerable anxiety. It is not for us to discuss the political aspect, or the many possibilities which may arise from it, but the evacuation of well over 100 people by air, in a few trips, from Kabul without any casualties or mishaps is a very noteworthy performance. On the decision being made that the women and children of the British Legation should be evacuated by air, a Vickers Victoria machine and four aeroplanes landed at Kabul on December 23rd and brought back 20 persons to Peshawar. The flight was repeated on the 24th and the 25th and, up to the time of going to press, well over 100 people have been evacuated.

The wives and families of foreign legations and civilian residents in Kabul have also been brought back to Peshawar.

This evacuation would, of course, not have been possible or at least not without heavy casualties if the aerodrome at Kabul had not at the time been in the hands of the Afghan regular troops.

The evacuation showed that, given the possibility of landing, the R. A. F. may relieve us of much anxiety as regards small outlying parties of loyalists during troubles affecting internal security.

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The interest taken, both at Home and in India in the cricket Test Matches in Australia has been intense.

Cricket is essentially a team game and the most satisfactory point about the success of the M. C. C. XI is that they were, in all senses of the word, a team. There was no one bright individual star who always made runs, or one particularly devastating bowler who took all the wickets, but, when a crisis occurred, someone always rose to the occasion.

The finest bit of play in the first 3 test matches was undoubtedly the opening partnership by Hobbs and Sutcliffe in the fourth innings of the 3rd test which gave England the Ashes.

Hobbs and Sutcliffe, England's famous opening pair, had, up till then, been a disappointment. Hobbs had been out of luck and Sutcliffe out of form.

When, however, the big occasion arose and England were set to make a comparatively large score on a worn wicket with the ball bumping and cutting up the turf, they showed the most superb defence against the keenest bowling and fielding and paved the way for an English victory.

As regards the bowling, Australia were at last getting a bit of their own back in meeting, in Larwood, a fast bowler with that extra yard of pace which may be just sufficient to dislodge the best of opening batsmen. Since the war, the two Australian bowlers, Gregory and MacDonald, alone had it and it always just turned the scale in their favour.

English cricket has undoubtedly been given a great fillip by our victory in three straight tests, but the Australians put up a magnificent fight and, had the third test gone the other way, as it well might have done, anything might have happened.

A FLIGHT TO CHITRAL.

By

LIEUT.-COL. G. M. ROUTH, C.B.E., D.S.O.

North of all the border states of the North-West Frontier of India, running right up to the snowy altitude of the highest mountain in the world, is the small territory of Chitral, about 150 miles in length by 50 in width. Its boundaries politically are Afghanistan, Kashmir and India proper, the last two in the shape of the small states of Hunza Ishkoman, Yasin, Ghizarkuh and in India, Swat and Dir. Russia is separated by a narrow tongue of Afghanistan 250 miles long, and in one place only eight miles broad, stretching right up to the unclimbable heights "where three Empires meet" in an academic geographical boundary point which no man or beast can ever reach.

As Sir Thomas Holdich says in his "Indian Borderland," the object of a boundary in such altitudes is not quite the same in that of a definite frontier line in lower and flatter regions. Till 1895, when the Frontier was surveyed as a result of the Kabul agreement of 1893, a buffer of independent tribes was placed between ourselves and Afghanistan. In that year the long attenuated arm reaching up to China was surveyed in conjunction with the Russians, and left as a sort of hedge, not in itself a barrier but something Russia could not cross without violating Afghanistan.

On the one side of this narrow neck is Chitral with half its length opposite the Afghan uplands of Badakshan. Chitral thus became a definite limit into which Afghan raiders and the unsettling processes of Russian exploration could not penetrate without such action being regarded (or not regarded) as a *casus belli*. Never in history has any large body of men been able to penetrate into India from China, or cross the frontier east of Chitral, so that this survey finally restricted our risks on India's land frontiers to the region between Chitral Fort and Seistan. Gilgit, our Kashmir outpost, about 120 miles east as the crow flies, acts in mutual support to prevent undesirable penetration. These two, with Leh, must always be occupied by us to prevent an aggressive and enterprising enemy spying out the land or raising trouble on the border. Chitral is the focus on which tracks from the Badakshan highlands converge, and as such forms an important charge of the Political Agent of the Malakand, through whom the Mehtar of Chitral is administered. To the serious invader from Badakshan

the problems over these barren heights are so immense that it is doubtful if five years undisturbed preparation with the whole resources of a great power could provide communications for a modern army, over a series of passes which might be anything up to 16,000. Although all the passes by which Buddhist pilgrims trickled into India were well-known to the Chinese, no Mongol horde ever attempted to cross these inhospitable solitudes into fertile defenceless India. Alexander penetrated more than a hundred miles south, below the confluence of the Kunar and Pech Rivers.

It happened as a direct result of the increased resources now considered necessary to maintain an army, that the writer was ordered to proceed to this outpost and organise the supply of modern equipment there. As the journey from the railhead at Dargai to Chitral Headquarters at Drosh normally means 140 miles covered on foot in 14 marches, and as elaborate preparations for guarding the route have to be made by the Political Agents with the Dir, Swat and Chitral levies, instructions were sent down that the journey should be performed by aeroplane from Risalpur. The actual flight only lasted, for purpose of comparison, one hour and forty minutes, say one march in six minutes.

There were other reasons for this method of transportation. The mule track traverses the Lowari Pass, 10,400, which is generally closed by snow from November to June. Any transport needed, therefore, as a result of the visit would either have to wait for the summer of 1929, or be sent up at the enhanced winter rates of £ 36 a ton instead of the contractor's summer rate of £ 21.

Sleeping at Risalpur on August 1st, we rose at five and proceeded to the flying ground. Four planes were making the journey, with specially selected pilots. Two were to return with the Political Agent, Malakand, and two with me. My own pilot had been described to me as "one of our better pilots" to give me confidence and he saw to it that I was well fastened in with the body clip and quick release, in the observer's seat. They lent me the map and fixed me up with the special helmet and goggles and insisted on a coat as I should be cold at the higher altitudes. One of the planes was to arrive from Peshawar at six o'clock, so a few minutes later we taxied to the further end of the aerodrome with our four D. H. 9 A's and took off in formation up wind, with our plane leading.

I forgot to enquire if parachutes were carried, probably not. If the engine fails over the rocky ravines of which the N. W. F. consists, the situation becomes precarious indeed, but a few months in such country soon familiarises pilots with the art of landing on the proverbial pocket handkerchief. They reckon that on a still day they can glide about a thousand feet for every mile with the engine shut off, so that a reasonable selection is possible if good height is maintained.

It was disappointing to find that one did not realise the moment of leaving the ground except by the altered angle presented by the R. A. F. bungalows now below us, and it was distressing to find no sort of thrill in the new sensation, less in fact than a racing car provides or contemplation of the drop from a high building. We had to rise to 12,000 feet; before reaching the gap (Lowarai Pass) in the Hindoo Raj range; about a hundred and twenty miles on through which the track passed at 10,400 and rose rapidly. Our route as followed on the map passed up the railway through Mardan, the well laid out home of the Guides, to Dargai. The great mass of the Malakand was not so conspicuous from the air although we were not very far above it. The pilot passed me back slips of paper as he recognised places of interest, such as Chakdara, on the Swat River, the next cantonment, and Dir, the last town before reaching the Pass. His next slip asked me to pass the map, which I held tightly and pushed forward but not realizing the rush of air, my arm was blown back at first. Had we lost the map the pilot would have found it difficult to follow the country from Dir onwards, and as flight leader he might even have had to return for another.

It was interesting to observe how the various public works—roads, railways and especially canals, had changed the face of the country and increased the potential population. India does not spend so much on its public works as France and America and Germany have spent in their colonies, chiefly because India works on a balance sheet, and these colonies don't, but as one looked at the results wrung from a stubborn nature on our own side in the administered territory, one felt that here alone was a justification for our existence.

Now the scenery became more rugged. Ahead was the gap in the pass we were gradually approaching. All round the range rose to fourteen and fifteen thousand feet, almost treeless, typical scenery of the higher Himalayas with snow in all the sheltered slopes. Anywhere

else in the world these would be major peaks, but here they are only foot hills to the great snowy mass of the Hindu Kush now looming up in front of us. Dominating the landscape and less than fifty miles away was the magnificent white sugar loaf of Tirach Dir 25,400 feet rising at least ten thousand feet from the lesser peaks around. Somewhere up in the gaps of the great white wall, lay Afghanistan territory and beyond it Russian Turkistan. On the left, to the north-west one could distinguish the lesser altitudes of Badakshan for we were flying practically parallel to the Afghan frontier. Gilgit was 150 miles north-east, no great distance in the Himalayas on a clear day, but we were not high enough to see into the Gilgit Valley.

The pass was crossed with a good thousand foot margin, but even so it looked as if we were only just clear of the rocks below. Then came a drop of twenty odd miles to Drosh. We circled once round the Fort and dropped down gracefully on to the tongue of a river bed prepared as a landing ground. All the Chitral world was there to meet us, including a local band and dancers in honour of the P. A. Malakand who was to return with two of the planes. My programme for the day was arranged—and a very full day it was—eight till four-thirty without rest of any sort, even at meals. After that the “better pilot” wanted to start back before the clouds gathered.

Drosh is a pretty little cantonment on the sloping bank of the Kunar river, 4,300 feet above sea level. The garrison consists of Indian infantry, gunners and sappers (about 1,100 regulars) and 1,000 Chitral Scouts. Most of the regulars live in one of the two forts and in well built quarters in the village—for Kila Drosh is little more. Their dealings with the Chitralis—known as Kashkars by the Pathans, are most friendly, for Chitralis are happy children, and find our occupation most profitable. The garrison are relieved every two years. This relief is a big affair and means a concentration of some 3,000 pack animals from all over the north of India. Although the hills are picketted for the column to pass, such sniping as occurs in the fourteen marches is very desultory and more a demonstration of affectionate welcome than really hostile.

The army in Chitral is divided into two distinct camps, those who were detailed, like the Indian battalion, and those who volunteered like the Gunners, Sappers and Supply Officers. The latter frequently

apply for a further tour. They love the sporting life, hockey, tennis and shooting. The first map I saw was headed "Incidence of chicaw in Chitral State. The second had patches marking red bear, markhor and ibex. This fraternity found many compensations for the entire absence of their own women kind, for Chitral, unlike Gilgit, is an Eveless Eden in this respect. Local supplies, such as meat, vegetables and timber, are very cheap. A full grown sheep can be purchased for instance at one rupee a few miles out. Living, therefore, is cheap and capital can be built up against the next beno in the "Little Village."

The other class see little that is attractive in this place. They are definitely cut off, except for occasional leave, from all the amenities which go to make India bearable. They are liable to periodical detachment with the one double company in Chitral Fort 26 miles north up the Kunar River. The great mountain masses around them get on their nerves, as does the rigor of the winter climate with snow so deep that the mails are sometimes held up for weeks. It was found necessary to remove one field officer's revolver because he thought the towering crag 8,000 feet above him was going to topple over and crush the whole camp and all it contained. To such men the relief has more than one meaning.

The two planes started back just before five. Already clouds were beginning to loom up in the direction of the pass and it was as well we started in time. My pilot rose, circled just above the post and came down over the cliff between the Fort and the landing ground. I thought it was engine failure or something of the sort and wondered what we were in for. On the landing ground the pilot informed me that he had been told a landing from the cliff side was not possible, and he had, therefore, decided to try it out. Having proved his information false, we started off again, climbing hard to get above the Pass. Now a high Indian valley on a tropical afternoon in the upper Himalayas is not like Sussex. Air pockets and eddies have to be reckoned with, and the air seems less buoyant. Three times we circled round Drosh, rising a few thousand feet each time. On one occasion the engine roared up 800 feet only to drop 1,000 feet the next moment. The going was what is known as bumpy and the pilot teamed with perspiration trying to keep the old bus straight. The D. H. 9A was a war production with an American Liberty engine and her ceiling is only 15,000 feet, so we began to get nervous that the massing clouds would prevent us seeing our way through the gap. One got a

very good idea of the country in covering these large circles, but we were asking a lot of the engine and we hoped it wouldn't fail us.

Now and then we caught a glimpse of the other plane on which we rapidly gained in height. Finally as it seemed almost too late we made a dash for the Pass and crossed at 14,400 feet, none too big a margin with 15,000 feet hills on either side and clouds scurrying through the lower levels. We just dodged one cloud and got clear with only slight envelopment in another. The pilot triumphantly put his thumb up to show me we had got over. Then a bit of paper to ask if I had seen our fellow traveller. We had both lost him. And no wonder. His engine wasn't playing up and he couldn't climb above 11,000 feet. Now crossing a Pass such as this through the very narrow gap is ticklish work at any time, but at 11,000 feet his margin of error was very small indeed, and many men would have returned to Drosh. However he decided to chance it and made the dash into a cloud, expecting any moment to be crashed into the rocks. It was a thoughtful pilot that met me in the Mess about two hours later and told me he'd got through "just before Peter shut the gates."

Our climb of about 10,000 feet had taken us over an hour and the whole journey to Risalpur took two hours and a half altogether. It had been a hard but interesting day, one I was not likely to forget. Whether the results of the mission justified the action of the authorities in sending me there by air remained to be seen. Personally it seemed to me that many economies had been effected and things made easier for that particular outpost, and I hoped to be earmarked for other such duties.

THE EVOLUTION OF THE COURT-MARTIAL.

By

CAPTAIN H. BULLOCK.

1. *Introductory.*

The system and procedure of the administration of justice in the English army have undergone little change of importance during the last three hundred years, though very different methods were in force before the Commonwealth.

It has been said that in early times the Sovereign personally heard and determined cases in which military persons were concerned ; but little evidence is obtainable to support this ; nor is there any satisfactory proof that military offenders were once tried by the High Court of Parliament. The first English military tribunal of which a clear picture can now be seen is the Court of the Constable and Marshal. From that permanent tribunal to the present court-martial— a temporarily constituted court—the transition is easily traced ; and, together with the causes that brought about the change, will be shewn in the pages that ensue. Summary justice, yet another way of enforcing military discipline, also needs notice ; and a glance at some of the punishments inflicted may be of interest.

2. *Parliament.*

There has been a long dispute as to whether Parliament, as such, had any jurisdiction over military offenders before a purely military court of justice was set up. The difficulty was to distinguish between a definitely *military* trial and those historical processes, attainder and impeachment.

In the year 1377 two individuals named William de Weston and John lord of Gomery (or Gomenys), on impeachment by the Commons, were ordered to appear before the Lords on charges of delivering up to the enemy two castles and a town in France. They were convicted, and Weston was sentenced to be drawn and quartered. The lord of Gomery escaped with beheading alone ; his punishment being mitigated partly in consideration of his rank, and partly since there was some doubt as to his status as a liege subject.

1355-6. Henry de Essex, standard-bearer to Henry II. was convicted by Parliament for cowardice, and punished by being shorn and incarcerated for life in the abbey of Reading, his lands being forfeited to the Crown. 1383.—Another instance is that of an early soldier-bishop (a fore-runner of the Duke of York who stands on his column outside the 'Senior', and who was Commander-in-Chief and Bishop of Osnaburg), who held both the see of Norwich and the rank of general: he was tried by Parliament and sentenced to deprivation of his personal assets, and of the right to have a sword carried before him.

These cases, though they have been quoted by Grose and others as examples of parliamentary jurisdiction over military offenders in respect of military offences, are held by the greatest authority, Sir James Stephen, in his *History of the Criminal Law* to be ordinary impeachments. The contention that the mediæval English Parliament possessed any exclusively military jurisdiction is therefore, whilst reliable evidence is absent, "not proven."

3. *The Court of the Constable and Marshal.*

The whole administration of military justice was formerly bound up with the maintenance of the high standards of chivalry, and it is therefore natural to find that the Court of the Constable and Marshal had a dual function in time of war. Firstly, it exercised full jurisdiction over all military offenders, as also over offences committed by civilians accompanying the forces in the field. In the second place, it had power to adjudge cases of injury to honour, and also to decide matters of precedence and coat armour.

1385.—Beyond these two proper fields for its activity, it ventured to encroach on the administration of the Common Law until it was restrained by Parliament; and it also exceeded, in various directions, its legitimate powers of dealing with contracts connected with wars overseas, with the same result.

1389.—In time of peace the only criminal jurisdiction properly possessed by the court was over criminal offences committed by Englishmen in foreign countries, though its power as an arbiter of chivalry remained. Both in war and peace, too, the court had power to try slander cases, in which parties to the suit were of noble birth, as part of its duty as a court of honour.

Only when slander suits or criminal offences against the Common Law were to be heard did the Constable preside over the court. The Marshal took his place when there were military cases for trial, or matters of honour for hearing. The President was assisted by two or more doctors of the Civil Law and a clerk of the court or Judge—Marshal, as he was called—the fore-runner of our modern judge advocate. In the reign of Henry VIII, the court was required to sit two days in the week, Monday and Thursday.

When the military commitments of the realm entailed the simultaneous prosecution of several military operations, a Court had necessarily to be provided for each force; and additional or deputy Constables and Marshals were appointed. The latent danger of the consequent duplication of some of the highest offices of state, coupled with the resultant depreciation thereof, must have been not inconsiderable factors in the development which soon started.

1533.—The office of Constable had (for all military purposes) been abolished in 1521; and shortly afterwards the Marshal's office, which had hitherto been held by individual grant from the Crown, became hereditary. This change, together with the factors just mentioned, contributed to the eventual establishment of the system by which military offenders were tried by a Court or Council of War, formed ordinarily of combatant officers. Sometimes commissioners were specially appointed as members of the Court of War, their power of inflicting the death sentence being subject to the veto of the general. During the period of the transition from the Marshal's Court to the Court-Martial, too, the royal commissions issued to the commanders of expeditions overseas often empowered them personally to administer justice, or to appoint deputies for that purpose. This idea of appointing a Court composed of special commissioners is found, for example, in the code of 1625, which provided "that there be authority given to any three or more commissioners to call a Marshal Court, and sit in commission to hear, judge and determine any fact done by soldiers; but to have no power to put to death till they have advertised (advised) the General, that (who) shall have authority of life and death for such troops as he shall command."

The initiation of the change to the Court-Martial system seems to date from about 1540, though it did not attain finality for at least a century. It is of the greatest importance, for from it derives

our abandonment of the attempt to administer justice by a permanent court (as is done in the French army to-day), and our substitution of the temporary tribunal, assembled for the particular occasion.

4. *The Marshal's Court.*—

During the interval between the disappearance of the Constable and the final introduction of the present type of military court, the Marshal usually wielded all the powers of both offices, his former superior's as well as his own, by means of the 'Marshal's Court'. The name of this latter undoubtedly suggested that ultimately adopted and preserved by the later 'Court Martial'.

5. *The Court-Martial.*—

The gradual adoption of the name 'Court-Martial' for the military tribunal may be seen from the titles used in contemporary military codes:—

Date.	Articles of War.	Name of Tribunal.
1600	Lord Mountjoy's	.. Marshal Court.
1611	Colony in Virginia	.. Martial Court.
1625	————	.. Marshal Court.
1627	————	.. Council of War.
1642	Earl of Newcastle	.. Council of War.
1642	Royalist	.. Court Marshal.
1642	Earl of Essex	.. Court Marshal; and also Marshal's Court.
1643	Scots	.. Court of War.
1652	Reprint of Essex's	.. Council of War; and also Court Marshal.
1673	Dutch War	.. Court-Martial.
1685	Monmouth's rising	.. Court-Martial.

1642. The Council of War mentioned in the Earl of Newcastle's Articles of War was composed of combatant officers, as appears from the context; and, from that time to this, there has been little change in the general principles and procedure of courts martial. The only points that deserve notice here are that it was long the custom for the officer who convened the court to take his seat as its president, and for the judge advocate to prosecute on behalf of the Crown. Changes in procedure have very often followed the example set by improvements in the procedure of civil courts.

6. *Summary Justice.*

Up to the close of the Napoleonic wars it had been the unchallenged practice of provost marshals to punish summarily persons whom they caught red-handed in the act of committing offences. After the conclusion of peace, the question of their authority to inflict such punishments was discussed. As a result, their authority was upheld; and later reaffirmed during discussions in the House of Commons. They were finally deprived of their summary powers in 1879, and are now expressly precluded from inflicting any punishment of their own authority; though a vestige of their former power survives in that a provost marshal appointed under the Indian Army Act may still inflict corporal punishment on a menial servant in time of war, in the field.

I have tried to give some account of the provost marshal and his office during the early days in the *Journal of the Society of Army Historical Research* for January 1928, and space does not permit of a detailed account here; but Grose's account of a later holder of the office is too good to be omitted. It appears that in 1689, the appointment of a fellow-countryman of "Dutch William's," by name Velthoven, as Provost-Marshal-General in Ireland was not an entire success, for his bills when submitted to the Commissioners of Accompts met with a decidedly cold reception at the hands of the audit authorities of the period. The latter indeed were unkind enough to allege that much of the expenditure said to have been incurred in respect of extra diet for prisoners awaiting the gallows had actually gone towards the pin money of a Mrs Mary Valentine, who was described as Velthoven's 'lady of pleasure,' and with whom, on subsequent inquiry, he was found to have shared a "tent lyned with blue" and four harnesses for wagon horses, the property of Their Majesties.

Velthoven appears further to have chosen an original method of maintaining his place in the lady's affections when he gave her cousin in Dublin "a large portmanteau full of iron bars, chains, fetters and other useful things for the securing of prisoners"—an unusual valentine for a lady to receive, it will be conceded. The result of the inquiry into Velthoven's affairs does not appear; but it may have been generally favourable to him, since the King paid his bill in the end.

7. *Military Punishments.*

The subject of military punishments is one that possesses a vast literature: mostly unpleasant reading too, it must be confessed. It now seems quite unnecessary to go into the subject of flogging once again, for example. This punishment is now, for the British army, a bad dream of the past. The pros and cons of it were themselves flogged to death in Parliament and in the press for many generations. Here, it is only intended to describe very briefly one or two of the more interesting old military punishments.

From the accounts for the year 1691 of the before-mentioned Velthoven may be taken two examples of a custom once very prevalent, the choosing by lot for condign punishment of one offender from amongst many. Some seven soldiers of the Earl of Nassau's regiment, "having bene abroad upon partie, and not done their dutie," were sentenced by court-martial to throw dice for a death-sentence. The lot "for to dye" fell upon one Hager; but he was pardoned and released a day later. A few days before, two deserters from Colonel Floyd's regiment who "by sentence of the high counsel of war and the approbation of General Ginkel" should have suffered death, dined under the gallows for a life, the loser being strung up forthwith.

Such punishment by lot was by no means peculiar to the English army of the period. For instance, the practice (as a matter of routine, be it said) was resorted to at an earlier date, in Alva's army during its march from Italy to the Low Countries, when three dragoons cast dice on a drum-head for their lives—they had been caught looting; and, as a contemporary historian has related, fate willed that the worst character of the three should lose the game and get hanged. Even so late as the Peninsular War, Wellington resorted to the practice on more than one occasion.

The still older practice of decimation is in some measure akin to punishment by lot. It was a recognised military custom; and, as is

not generally known, was prescribed as late as 1685 by the Articles of War, as the sole punishment for concerted communication with the enemy. As clause VIII of the Articles has it, "Whatever Regiment, Troop or Company shall treat with such Rebels or Enemies or enter into any condition with them without His Majesty's leave, . . . the officers of such Regiment, Troop or Company shall die for it, and of the Soldiers . . . every tenth man by lot shall be hanged, and the rest punished at the discretion of the General Court-Martial."

According to Grose, this practice was introduced in order to avoid weakening the strength of the forces by wholesale executions; though according to modern ideas it would seem preferable to try to seek out and execute the ringleaders rather than men chosen quite at random. The usual way in which a decimation was carried out was for tokens of wood, one for every man, to be placed in a helmet, every tenth token being marked with the letter D. The helmet was shaken and put on a table in front of the commanding officer; each man filed past and drew a counter which he presented to an officer standing by to receive it. If it bore the fatal mark, its unlucky holder was seized and marched to the rear. Sometimes, Grose says, the decimation was inflicted by the selection of the righthand man of each rank for execution, on the ground that as the right of every rank was a post of honour, it was the special privilege of the occupier of that position to shew a good example!

TALES OF A TAIL-TWISTER.

By

F. C. M.

“Tail-twister” was the derisive name given to a hard-working transport officer by his jealous fellow Subs. The writer was appointed a T. O. to the Kuram Field Force in October 1878. He knew nothing about the management of camels nor of mules, but this was the only billet available. The only transport officer of the force who had any experience was the late Captain Goad of the Hyderabad Contingent, who had served with the mule-train in Abyssinia in 1867. He was mortally wounded when part of General Roberts’ Force returned to Kuram by the Sapri Pass which lies south of the Peiwar Kotal (or pass). I was forgetting that several officers of the Punjab Frontier Force were more or less acquainted with the management of camels and mules as the small moveable columns at each frontier station were supplied with half regimental transport. The animals were well cared for. A cavalry regiment and a mountain battery and three infantry regiments of the Frontier Force were then serving under General Roberts.

For the first three or four months no grain ration was provided for the camels of the Kuram Force. They picked up a little grazing after arriving, often late, at the new camping grounds. The T. O. had to be on the move with his convoy daily from about 4 a.m. till the evening, when the animals with the rear-guard crawled into camp. The same conditions, one heard, prevailed on the Khyber and Kandahar lines of advance into Afghanistan. So, naturally, the poor camels died in hundreds from overwork and want of proper food.

During the summer of 1879, a rest camp for sick camels was formed near the pretty village of Zeran at the foot of the Safed Koh mountains, not far from Kuram Fort. Lieut. Walter Kitchener, a younger brother of Lord Kitchener’s, and I were in charge. The grazing there was unsuitable and the unfortunate camels died daily. A large bonfire was kept up in which the bodies were burnt. At times when the wind was unfavourable the odours from this rough incinerator were most unpleasant. One learnt, later, that camels should never be worked in the hot weather. They are allowed to graze and breed then in the jungles on the banks of the Punjab rivers. This was impossible during the 2nd Afghan War.

Later on I was sent to Dera Ishmael Khan (Dera Dismal) and brought back from there several hundred newly purchased camels. I travelled from Thull, our frontier post, to Bannu through independent Wazir country belonging to the Kabul Khel section of that tribe.

At Zarwan village, halfway to Bannu, I put up with the headman and pitched my 80 lb. tent in his small courtyard. He was a fine looking fellow and a real gentleman. The tribal escort or "badragga" was provided by him. "'Catch 'em alive O's'" we called them. I forget this headman's or malik's name. His brother was Madda Mir, a real rascal. He pointed out to me, with great glee, the exact spot where an officer's syce (groom) had been shot recently from the surrounding rocks. The other three or four men of the escort were a very decent and sporting lot. They looked upon me as a marvellous shot when I knocked over a few "see-see", a small light grey partridge. "See-see" is its cry when flushed. They patted me on the back and could not understand why I did not pot the birds or shoot them as they ran up the rocks.

At Bannu I was quartered in the Deputy Commissioner's bungalow. He let me, one day, attend his court. It was crowded with wild Wazirs. The paper-weight on the office table was a large bore Deringer pistol, warranted to stop any ghazi (fanatic) or disappointed claimant.

I was very hospitably treated at the Frontier Force garrison messes at Bannu and Dera Ishmael Khan. In those days the officers dined in plain clothes. There were several civilian honorary members, and all seemed to pull well together. The heat at the dak bungalows (rest houses) at Peyzoo and Yaruck was terrible. On the return march, at Peyzoo, I borrowed a sowar's snider carbine and tried for oorial (mountain sheep) on the Sheikhboodeen hill. This also held "markhor", a large wild goat with barley sugar shaped horns. In stalking some oorial I had a nasty fall on the rocks. The bruise developed into erysipelas. This I was treated for by a gigantic cheery Irish doctor. He soon put me right by giving the swollen elbow a deep gash.

His mount on the march was a big mule and one of his weapons was a long heavy shillelagh. With it he was reported to have brained a wild boar on the banks of the river Kuram. His revolver carried the snider cartridge. In spite of its weight it was probably a hard and high kicker.

After a year's drudgery I was not sorry to leave the Transport Department. A more interesting billet was allotted to me at Landi Kotal on the Khyber Line.

The Transport Department was now taken over, at Kabul, by Colonel Lowe of the 13th Bengal Lancers who later, in 1895, as General Sir Robert Lowe, commanded the Chitral Relief Force. Colonel Lowe started the "stage system" for convoys. The animals were now properly fed and looked after at each post and their attendants properly clothed and kept in order. One of Colonel Lowe's best Assistant T. O's. was Lieut. Booth (Tiger Booth) of the 33rd Foot.

If those drastic changes had not been brought about Lord Robert's fine Force proceeding to the relief of Kandahar could not have been provided with its very serviceable mule and pony carriage.

It is a pity that such proper arrangements for the Transport Department could not have been started at the commencement of the Afghan War.

On the 28th November, 1878, when the Kuram Force started from Kuram Fort towards the Peiwar Kotal the poor transport animals had been loaded up early on that cold morning and we had practically a double march before us. Several deep nullahs had to be crossed *en route*. I was acting as T. O. to the 2nd Brigade. As we approached the deserted Afghan Cantonment of Habib Killa we saw shells bursting over where we supposed our force would encamp. We heard later that as the troops prepared to take over the camping grounds marked out for them they were suddenly shelled by mountain guns from the wooded heights on the left. Little damage was done as, luckily, most of the shells were "duds". The troops had to fall back some little distance to the edge of a jungle of holly and ilex—the home of many chattering magpies. By the time it was dark all was quiet and men and animals were enjoying a well earned rest. This was suddenly disturbed by the belated rear-guard. It was impossible to find my tent—but I stumbled upon that of our Brigadier-General Thelwall, and reported "all correct". He and his staff were indulging in a nightcap of rum and water and administered the same to me.

The 23rd Pioneers were bivouacing close by and Major Anderson of that regiment kindly lent me a hospital "dooly", a light covered palanquin. In it I slept comfortably having been supplied by Ranken and Co., the Simla tailors, with a very warm and serviceable great coat of "puttoo". Kashmir cloth, lined with barrak, soft material

made of camel's hair. The detachable headpiece made a useful foot warmer. The next few days were spent in making the camps comfortable and in sending out reconnoitring parties.

On the night of the 1st December the flanking force, destined for the main attack on the Peiwar Pass by that of the Spingawai (white cow) stole silently out of camp. I was the only British officer left in the 2nd Brigade camp and was ordered to keep the camp fires burning so as to help to deceive the enemy. With luck I might have been with the gallant 5th Gurkhas on that flank march as that regiment was short of British officers. Unfortunately my "boss" the Chief Commissariat Officer, who also "bossed" the transport, objected. There were then only 3 transport officers, including the Superintendent, Major Moriarty, 7th Bengal Infantry. The latter was soon after appointed Treasury Officer. Major Power Palmer, 9th Bengal Cavalry, replacing him. Major Palmer on 2nd December was attached to the 5th Punjab Infantry. He was given the command of the Turi tribesmen of the Kuram Valley and led them through difficult mountains and well wooded country against the Afghans right. The Turis are Shiah Mahomedans and so deadly enemies of their oppressors, the Afghans, who are of the Sunni persuasion. 'Loot', no doubt, was the chief incentive for this Turi Force, but I fancy that the 2nd Bn. 8th The King's by their direct attack on the Peiwar Kotal, forestalled them to some degree. Brigadier-General A. H. Cobbe, 1st Bn. 17th Foot, commanded the direct attack. He was unfortunately severely wounded in the leg. Luckily the bullet did not strike a bone or an artery. One of his orderly officers, Lieut. E. Maisey, 8th King's, brought him down to camp. I found the General comfortably settled in bed puffing the usual long cheroot. His faithful bearer was in tears. On the 3rd December the transport animals were moved up to the top of the Pass, over 8,000 feet elevation, and down to the camp at Zabardast Killa. The rocky track up the Pass was then scarcely fit for our down-country camels. Here the men of the 72nd Highlanders baggage guard were especially useful. I was also ably assisted by the Indian soldiers of the different corps. Halfway up Colonel Brownlow of the 72nd suddenly appeared and hurried us on as he did not wish his men to be a second night without their bedding. Colonel Brownlow was killed at the head of his splendid regiment at the battle of Kandahar, 1st September 1880. On the top of the Peiwer Kotal the officers of the 8th King's had tea going, the captured

Afghan drums serving as tea tables. They had also collected a good deal of other 'loot' such as handsome brass helmets abandoned by the Afghan gunners. The night of the 3rd December was the coldest I have ever experienced. A bitter wind from the snowy Sika Reim Mountain (15,600 ft.) blew under the flaps of my bivouac tent—my 80 lb. one had gone astray.

On the 4th December there was a very impressive funeral. Padre Adams, who later won the V. C., officiated. The bodies of Major Kelso, No. 1 Punjab Mountain Battery, and Major Anderson, 23rd Pioneers, were sewn up in their red blankets. They had been killed during the heavy fighting on the Spingawai route. A brave N.-C. O. and several men of the Pioneers were killed when receiving Major Anderson's body. The force now proceeded to Ali Khel, a large well built village belonging to the sturdy Jagis. Commissariat and transport officers were here employed in collecting flour and other provisions which had been stored for the Afghan army. Armed parties of infantry were also busy searching for Enfield rifles and ammunition which the Jagis had taken from the fleeing Afghans. Dung heaps and the women's quarters were sure finds for these hidden articles. The women's loud cries and protests were unheeded—the men had temporarily decamped. After this was a case of continual convoy duty for the hard worked T. O.—though several other officers were appointed to the department after Major Power Palmer had taken charge—one had scarcely time for proper meals. We were, however, always very hospitably entertained by the 12th Bengal Cavalry and the 21st Punjab Infantry whenever we passed their camps at Hazar Pir Ziaret—this means the shrine of the 1,000 saints. How these cruel people could raise that number is a puzzle.

Most Afghan villages are content with a single saint. Some months ago a writer in the *Cornhill Magazine* in an amusing article worked in the old story of the Zakka Khel Afridi tribe being saintless. Being twitted as to this by the other Khels the Zakhas promptly seized the first holy looking man they came upon in the Khyber Pass as he proceeded peacefully with the weekly convoy towards Kabul. The unfortunate one was carried off to the collection of Zakka Khel villages in the Bazar valley. After feasting him, he was lead to a neighbouring grove and there despatched with knives. His tomb, at this spot, and the thorny bushes round it are adorned with red and blue and dirty white rags. Whether this saint brought the Zakka Khel any good luck is not known.

GOLD MEDAL PRIZE ESSAY COMPETITION, 1928—(2nd Prize.)

By

MAJOR J. McL. G. TAYLOR.

SUBJECT.

“In view of the number of weapons which the Indian soldier has to be taught in the short period of his colour service, how do you consider that our system of training could be simplified so as to retain what is essential to his efficiency and cut out everything which is unnecessary.”

* * * * *

1. A brief review of the tactics and training of the army during the past 100 years will give us a better understanding of the methods employed to keep pace with existing conditions during definite phases. It is hoped that this may help us to deal with the matter in hand, a simplification of the existing system.

Broadly speaking, practically all changes can be simplified down to a combat between shock and fire power.

1st Phase. Up to the Crimean War :—

All training was concentrated on a rigid drill discipline in order to ensure the troops arriving on the comparatively small field of battle in the most suitable formations. The training and action of the individual and junior leaders up to regimental commanders, was subordinated to the will of a few higher commanders who maintained a direct control throughout the battle. Initiative was, therefore, not encouraged, no attempt was made to gain a gradual superiority of fire, and everything depended on the direction of the opening volleys and case shot—both at very short range—followed by the weight of troops at the decisive point.

2nd Phase. 1860 to the close of the Boer War :—

This can be summarised into a gradual increase in the range and rapidity of fire. On the introduction of the breech-loading rifle and gun, sudden and revolutionary changes in formations and movements took place, which became more marked after the Boer War. The rigid lines and squares began to disappear, the tactics of the battle developed in importance, and more open, as opposed to close, formations were practised. By reason of the range of fire, battle-fields increased in size, and armies confronted each other at greater distances. The influence of the higher commanders over the conduct of the battle became considerably lessened, their visual and constant control was

replaced by the initiative of regimental junior commanders, and hence arose the necessity for an individual training of all officers—tested by examination throughout their careers.

3rd Phase. 1902 to 1914 :—

The introduction of the machine gun, coupled with the increased rate and power of fire of all guns necessitated still greater changes in formations. The demand for closer co-operation not only between different arms but between the smaller bodies of infantry spread out over the large battle-field led to a greater importance in communications. This further increased the responsibility of N. C. Os. right down to the section commander, and even the individual soldier had to undergo a more detailed instruction to adapt himself to the commencement of specialization.

It then became evident that individual training must be carried on for all ranks as a foundation for the more specialized modern methods of killing an enemy, and a stronger call on the man's skill-at-arms, intelligence, and education was established.

Through all this latter phase we find a steady increase in the manuals for training. A marked change was the development from the "Combined Training" of post Boer War days to the introduction of two or more separate manuals for each arm in addition to a general manual, the F. S. R. Specialized manuals for the newer forms of training, such as machine guns and signalling, were barely started before the out-break of the Great War.

The machine was becoming unwieldy. Something had to be done with the organization to give greater responsibility to junior leaders and to relieve the centralization of the infantry battalion commander. After a prolonged struggle with the ever-present conservative school of thought in the army, the 4 company, together with the platoon, organization was introduced in the British Army. The Indian Army followed suit after the Great War had commenced.

2. After the conclusion of the Great War it was recognised that a radical reorganization of the Indian Army must be carried out to keep pace with the requirements of modern war. In the methods employed tradition was swept aside, both in the composition and re-numbering of practically every unit.

Simultaneously, a slight modification took place in the reorganization of the British Army. A further change of evolution has since

taken place by the abolition of the lance, and the decisions now in course of change to re-equip and train all cavalry as semi-armoured units, and to reorganize all British infantry battalions into 3 companies with an anti-tank unit and a separate machine gun company.

In all these latter introductions, we see that, with the advent of mechanization, there has come a definite break with tradition, and, in course of time, there is no doubt that, subject to finance, the Indian Army will adapt itself.

It is therefore permissible as the subject of this paper warrants to examine whether a sufficient breaking with the past has taken place to justify further eliminations of unessentials.

3. After the above analyses, an impression is left—especially from latter days that, in spite of continual innovations, there have been few renovations. Hence, the demand for time, for demanualization, and for elimination of all those practices and customs which do not contribute towards the making of the fully trained soldier for war.

The cry still goes forth from junior and regimental commanders that they cannot find the time to get through their annual training programme with the resultant efficiency which they would wish. In this outcry are included the excessive details and subjects to train in the time allotted, the abundance of office work, the lengthy leave concessions to all ranks which interferes with continuity, and the lack of facilities or opportunity for co-operation with other arms or for training with certain new equipment, such as gas-helmets.

The training required from a battalion is admittedly far more than in pre-war days. Including the additional training in Lewis guns, machine guns, gas and smoke (both practically non-existent), a greater efficiency or skill is required in musketry, bayonet, physical and signal training and in co-operation with other arms. We have become more scientific and specialized and this fact, in itself, is a reason for more detailed instruction and education.

Where and how can we find the time ?

4. *Factors affecting the existing situation.*

It is necessary to remember that the majority of Indian soldiers are illiterate, and that their three outstanding characteristics are ;

- (1) Lack of a practical imagination. (The emotional side is there all right, but this will “cut no ice” in a modern army).

(2) Dislike of responsibility.

(3) Lack of concentration.

These have to be overcome, as far as possible, in the short time available. A plethora of drill, or stereotyped forms of training such as the same old musketry practices and bayonet training year after year will not contribute to their effacement.

On drill we may find adequate scope for a drastic purge of many exercises and movements—and with them the cutting out of the many pages which they comprise in our I. T. Vol. I.

In the very first chapter and section, and under the general Part I, heading of “Drill” we find that all officers and N. C. O.s are to be so imbued with principles that “in the heat of action, they will automatically apply them in the right way” (I. T. Section I (2)). A little later we are told that “the first and quickest method of teaching discipline is close order drill” and in the same section “It is the quality of the drill and not the length of time spent on it which is important” (I. T. Section 11 (12)). Again, while speaking of discipline as the bedrock of all training, we are told that “the power of modern weapons calls for increased initiative on the part of subordinate leaders and increased tactical knowledge on the part of all ranks.” [I. T. Sec. 3 (2)].

Are there any drill movements or rifle exercises which do not serve any purpose in the heat of action, and which, though preserving a sentimental link with the past, could be well discarded in order to shorten the teaching and repetition of drill and gain time for practice in more advanced training, including initiative?

A more detailed examination must now be made.

Detail.

Comments.

Dressing. I. T. Section 39... Why have two methods? The usual picture is men shifting continually after each halt to regain their dressing. Let the dressing be corrected occasionally by the “for ceremonial purposes” Right (or Left) dress. The aim of drill is steadiness and precision.

Slope Arms (and Order from the Slope). An anachronism from the days when we had to keep our powder dry in (or from falling out of) the old muzzle loaders.

Pile Arms (and Un-pile) .. Out of date, and takes some time to teach. A clumsy exercise and impractical. "Ground Arms" or each man keeping his rifle with him (slung over his shoulder as he pleases) cover all such circumstances in peace and war.

Change Arms (from the slope).	}	Unpractical and unnecessary.
Secure Arms		

Fix Bayonets .. Unnecessary for drill or ceremonial.

Unfix Bayonets. A man can be taught how to do it in bayonet training. Sentries for guards can do it before and after they come on duty. If Rifle Regiments can dispense with it, why not all?

Rifle Step. .. This is entirely opposed to co-operation, one of our watchwords, and both impractical and unnatural for all peace or war purposes.

Also almost impossible for the Indian soldier to maintain. If Rifle Regiments have to confirm to other troops when brigaded with them (I. T. Sec. 21 (3)), why not stick to that one step always.

"Feu-de-joie." .. Is only used for a ceremonial form of salute, and necessitates practice for a week before the particular parade, after which its use is closed down for another year. Out of date.

Extended Order Movement. Comprises 5 pages of Chapter IV. The "Field Signals" and "Battle Drill" of Chapters VII and VIII cover all requirements in the field.

Battalion Drill. .. Forming Mass or deploying from Mass are most unwieldy, clumsy, and slow movements which are entirely unfitted for the battle-field or even for ceremonial

parades. The simple formation for the parade ground and for all practical purposes is close column (or column) of companies.

Similarly all movements to and from Echelon are entirely unpractical as well as giving a clumsy picture on the parade ground. Battle Drill provides for all necessary field formations.

Platoon and Coy. Drill . . Are all the movements laid down in the books suitable for use in the field.? For instance, what company will "Form line of platoons in fours at—paces interval when going into the attack." To begin with, their depth would be lost, and Battle Drill is then unable to conform.

Furlough and leave is a constant drain on the continuity of all training. It is admitted that improvements have been made by sending troops on leave and furlough in bulk—one or more companies at a time—where feasible.

The present regulations entitle a man to 3 months' furlough every other year and leave it to a C. O.'s discretion to grant up to 3 months leave, in the other alternate years. It would be interesting to know how many C. O.s give permission for the full period of three months leave. Probably the majority. This must lead to disparity in a concession which should be uniform throughout the Indian Army. The writer is convinced that the Indian soldier would have been quite content with only 1 month to 6 weeks leave in the alternate year (according to distance from his home), now that the furlough period has been increased from $2\frac{1}{2}$ to 3 months and is definitely available in every alternate year.

It does not seem to be fully realized what a small number of days per annum the average Indian soldier is available for training. The astounding minimum figures below will give a rough idea of the number of non-working days per annum the average soldier receives

from the commencement of his 3rd to the conclusion of his 5 years service.

	<i>Days.</i>	
Sundays	52	
Thursdays	52	
Furlough or Leave	75	(Sundays and Thursdays during this period are already accounted for).
British Holidays (Xmas etc.)	8	
Indian religious holidays	20	
	<hr/> 207	

N.B.—A few extra days for occasional guard or musketry duties on holidays is counter-balanced by an allowance of a few days for casual leave or sickness.

That is 621 non-working days (or $1\frac{3}{5}$ years) during the final 3 years of his 5 years' colour service.

Therefore, all the more reason for simplification and getting down to essentials.

Taking into consideration the actual months of work of the individual, is 5 years' a long enough service for the Indian soldier? High specialization is the tendency of the day and we lose him just as he is becoming a really useful and efficient soldier.

We still persist in having two rates of rifle fire. In the excitement of battle you will never see a normal slow rate of fire, and whatever the order, "Rapid Fire" or "Fire", each man will fire at the rate necessary for the urgency of hitting the target.

The S. A. T. volumes contain a mass of heterogeneous instructions in several kinds of tables. Why not have one table for all arms; a certain number of practices to be fired by the individual according to his arm, his degree of proficiency in the previous year, and his length of service. Classification practices could be the same for all with fewer points to be obtained by the recruit or departmental soldier and fewer practices to be fired by the man who had attained to 1st Class proficiency during the previous year.

After 2 years' service the majority of soldiers would then have time available for firing more battle practices under conditions as near active service as possible, including rain and high winds.

The theory of Lewis gun instruction can still be simplified to the benefit of the unimaginative Indian soldier. For instance, the reason for a stoppage is merely a clog to his memory. The immediate cause and its remedy is all that he requires to know for practical purposes.

In bayonet fighting there has at last been some simplification in the past two years. We can remember the constant changes for the On Guard position. We now seek the bayonet spirit without too much exactness. It is high time, however, that the pulling back of the cocking piece in all bayonet practice was left to the soldier's initiative as occasion demands. Constant minor injuries to fingers and hands, necessitating light duty, will then be avoided, and the soldier will be able to grip his rifle in the only natural position, the small of the butt.

A word might be said here about the method of disseminating minor changes in musketry instruction or practice. The first intimation generally reaches a battalion through one of its N. C. O.'s returned from a course. It would surely be better for a date, say January 1st, to be fixed when all changes found necessary during the past year, that is after delay for full test and trial, were circulated direct to battalions. Many of these are the sudden whim of some musketry instructor and are adopted without full consideration, only to be changed again later. A shining example of this is the manipulation of the safety catch.

5. Steering for the smooth waters, we now decide to clear the mines—the unessentials and obstacles which are impeding our progress to simplification.

The following action is taken :—

- (1) Abolish all the details of rifle exercises and drill movements mentioned in para. 4 (b).
- (2) Reduce the leave granted to Indian soldiers in alternate years to 1 month or 6 weeks according to the distance from his home.
- (3) Increase the colour service to 7 years, reducing the Class "A" and Class "B" Reserve Service by 1 year each.

The reserve is now practically full and can be easily maintained. The suggestion above benefits economy as well as efficiency.

- (4) Revise the 3 Small Arms Training Volumes. It is open to consideration whether it would not facilitate the work

in an active battalion if all recruits were given a longer training in musketry, *e.g.*, the firing of the whole Table B. (with battle practices) at the conclusion of their training. They would then arrive primed and ready for more advanced training.

This would necessitate an extension of their recruits' period but an increase in colour service will remedy the delay in his arrival.

Once some such drastic eliminations have been taken in hand, the way will be clear and the time available for a closer attention to more advanced training, including co-operation in every form.

6. Some of these eliminations may seem drastic and would certainly make the die-hards raise their eyebrows in horror at this meddling with hardened tradition, but something has to be done, and done now. We cannot maintain all the conditions and pretty pictures of the past and at the same time adapt ourselves to the fast changing times. Our minds must be kept concentrated on the need for speed and accuracy, on the need for getting on with the mastering of the detail of the new weapons and their tactical application, instead of having to constantly look back and waste our time over hours spent on platoon, company and battalion drills, and all the little precisions in the various formations and movements pertaining to them. All intricate and elaborate instructions in training, which have no bearing on the ultimate issue, should be abolished forthwith or ruthlessly cut down. The days of the inspection of a unit by battalion parade are over, those times when the efforts of all and sundry were devoted for hours to the practice of all the intricacies in distances, positions and movements. The result, we will imagine, was excellent. Praise was forthcoming from the general, a special battalion order was published and the Indian soldier went away with the idea that, after all, ceremonial was the be-all and end-all of training, and the "paltan" was "bahut achcha." Nothing else mattered much.

True; the culmination of a good disciplined regiment is a smart ceremonial parade. But we want our soldier to be an expert at killing as well.

Since the Peninsular and Crimean War days numerous changes, not without protest, have been introduced. The role of Light Infantry, which name is still clung to by many regiments, has disappeared. The "Cavalry" arm still remains in spite of their complete change in

armament. If rifle drill, the only remaining practical drill with any meaning, is adopted by all other infantry regiments, there is no reason why they should not retain their distinctive titles as links with the past.

I would emphasise again that the demands made upon leaders and men alike are far greater than before. War has become more scientific, and the physical and moral effect of armament more terrifying and destructive.

The subjects and arms in which a soldier has to be proficient are more specialized than formerly, and it has to be fully recognized that we now move in small handy parties instead of battalions in line as at the Battle of Waterloo. In place of the old instant obedience to a rigid discipline—easy to attain with the illiterate cultivator—the Indian soldier has awaiting him a long trial and test in the use of his mind and his hands.

We are at the cross-roads and must decide once and for all. "The beginning is for" us and her; "but where and of what sort and for whom will the end be (*Carlyle's "French Revolution*)."

AN AMATEUR'S NOTES ON LIFE ASSURANCE

By

LIEUT.-COL. G. M. ROUTH, C.B.E., D.S.O.

From time to time one sees the names of retired officers and others advertised in Service Journals as giving free advice on insurance.

Is it free? If so, why do they solicit your custom?

For answer see Whittakers Almanack (3/6 edition).

About the middle of the book will be found some fifteen pages [of statistics and advice on Life, Fire and general assurance, which cannot fail to prove even to the superficial reader how easily he may be let down.

Only the more important British and eight Colonial companies are dealt with. The tables show whether these offices are mutual or proprietary and whether they transact other business besides life assurance. The Life Funds and date of establishment, premium income, rate of interest earned are all laid out for comparison. The last two columns of the first table show the degree of stringency in the valuation of policies and the rate of interest assumed. Foot-notes indicate whether the offices pay or do not pay commission.

Then follows a note on remittance of income tax on premiums paid by the insurer.

The next table shows the rate of bonus, calculated on Life and Endowment assurances for £. 100. It will be seen that these vary from thirty shillings to as much as £. 3-15 in the Australian Mutual, which is drastic in its selections and well placed with regard to its investments. Then follows a table shewing the average premiums needed for a whole life assurance for £. 100 at various ages, with and without profits, with a subsequent detail of premium required by each office to secure this benefit with profits. Then come similar figures for endowment assurances. The two last tables are the addresses of the various companies and the annuities they offer for a single premium of £. 100 at various ages, which brings out strikingly the greater probability of life enjoyed by females.

The Insurance Editor sums up with a few words of guidance and offers to advise prospective insurers on the types of insurance which are likely to suit them best. Whether or not he is disinterested in the sense that he would not profit in his advice by Commissions, is not clear. Probably in such a case this factor would not be allowed to bias his judgment.

Attention is drawn to these tables, because many people do not know of the existence in this publication of insurance details in which ten minutes study will put the whole insurance problem in a fresh light to any one of an enquiring turn of mind.

Sandwiched among the other names will be found two companies which do not pay commissions. Here is the answer to our opening question. The insurance agents who advertise usually-not always-go to companies who do pay commissions, hence their altruistic interest in your protection against accidents. Those commissions which they get come out of *your* premiums, and your benefits are necessarily reduced by the percentage they get. Such commissions average about $\frac{1}{3}$ of offices' overhead charges and about 5 per cent. of their yearly income from premiums.

Now study the overhead charges of the various companies. You will see that they vary from 5 per cent. to as much as 31 per cent. It stands to reason that other things being equal you are likely to do better in a company which devotes 95 per cent. to benefits than one which only devotes 69 per cent. Examining more closely, you will see that the lowest overhead costs—speaking generally, are the non-commission paying firms—they save on commissions. Then come the “Mutual” companies. Their profits or investments and “Good Lives” go to those insured. Last of all come the proprietary companies, who have to satisfy their share-holders, with your assistance. These include some of the best known companies whom your friends tell you are thoroughly satisfactory. Quite so. It pays them. But a comparative statement of the benefits obtainable from other companies less advertised and less vocal, would astonish your friends.

Why then do people go to the expensive companies? Briefly, they don't know any better. Insurance is a complicated subject, and as one very good (commission) company told the writer, most people are safer to get a good adviser on insurance and take his advice.

Some of these advisers are really excellent. The good ones keep to good companies. Their experience enables you to get much better results than you would achieve without study. They usually have evolved benefits for cases such as yours which compare very favourably with anything you would hit on in the plenitude of your ignorance. They are very anxious that you should keep their advice confidential,

and with good reasons. Their devices are often most ingenious and give you advantages which it would be very unlikely a company not so conversant with your requirements would think of. Yet supposing that by dint of ordinary enquiry and study, you were to hit on a plan similar to the device of the insurance agent, and again supposing you were to take such plan to a non-commission paying, (or other) company it is more than likely that such company would offer you better terms than your agent would obtain for you, better by the amount of such agents annual commission, for such office can quote less the value of this commission. When calling for a contract in the business world, you would ordinarily have the advantage of comparing tenders in regard to the best lay out of your money, but in the insurance world agents cannot afford to let you so utilise their experience, hence the certificates they demand that you will keep their advice confidential.

Let us suppose however that in your pursuit of the ideal company you obtain a quotation from a non-commission company and your pal tells you of some wonderful family benefactors in the insurance business, and you go and see them in their den. They will be very polite to you. Most of them are public school boys and politeness is part of their business. While they are working out figures on a calculating machine you mention casually the non-commission company's figures you have already. Three times I have seen the assistant stop with a pleasant smile. "Oh we can't quote against them." "In that case," one asks "why does not every one go to them?" Luckily for us comes the reply "the public don't all know it."

Of course this is not the whole story. Insurance is not so simple. Some companies invest better than others, either more productively or more conservatively. Some companies cater for particular cases, and there are many instances where the non-commission is definitely a less profitable investment than some commission company who specialises on a certain feature which may suit yourself. Then again some companies are too recent for safety, or have too small a capital or are too speculative for such important risks as insurance. Others, as can be seen from the auditor's reports, do not invest widely and may fail as a result of some local debacle. Some, especially Canadian and Australian companies, escape English income tax and can devote amounts so saved to better benefits. Others demand special premiums in peace or war to cover the risks of active service.

Some insist on a very thorough medical examination, while others are laxer in this respect. All these factors must be weighed up in working out what suits the individual.

There is no statutory limitation at present as regards the class of investments permitted for insurance funds, the only limitation being that contained in the company's articles of association, which have to be registered under the Company Act, and are of course accessible to intending clients. It is true also that the balance sheet has to show investments in certain classes, but inside those classes, for instance take the class of railway and other ordinary stocks and shares, there is scope for a very considerable difference in the degree of security obtained.

This forms an additional reason for selecting a company of unquestioned standing, which does not sacrifice security to enticing profits likely to attract business.

Profits, and so the attractions offered to policy holders, depend on the financial policy adopted, and on the selection of lives. Careful medical examinations before acceptance will eventually reduce the amounts paid out on death amounts each year and so increase the rate of profits. Weakness in the above factors and swelled cost of management may mean that the company has to adopt unusual means of collecting business. Such means may include higher commissions to smooth tongued agents, and methods of misleading such as that commonly in use after the war. Certain companies declared an increase of profits on policies, of say two shillings per cent. but did not emphasise the fact that the last such increase was ten years before whereas they were competing against more provident companies whose bonuses had been declared regularly quinquennially. The impression given was distinctly false.

The intention of this article is not to advise on such features but to draw attention to the all important aim of the insurance agent's commission, and to ask intending policy holders to view their activities in the correct perspective.

So much for the companies, but even if you get the best company of the lot, they won't be able to cover all your needs. Their actuaries usually specialise on one or two features, so that your business is to spot the good companies and then obtain your special requirements from a selection. A soldier's insurance, especially in India,

may be looked upon as a line of its own. Perhaps the best illustration would be a recapitulation of actual insurances of an officer in India reduced to an annual premium of £ 10 as a basis. Although the age differences in column 3 rather complicate the figures for purposes of comparison, they still give some idea of possible assurance combinations and their value for particular purposes.

Effect of an annual premium of £. 10 insured as below :—

Company.	Date taken out.	Age taken out.	Benefit at death.	Profits after years Endowment.						Class of Insurance.		
				10	20	30	40	Rates of profits per £ 100	£.		Age.	Yrs.
1	2	3	4	5				6	7	8	9	10
A.	.. 1910	Yrs. 28	£. 181	..	70 (h)	..	..	..	474	55	1937	Double Endowment Policy.
B.	.. 1910	28	269	..	108 (h)	..	..	..	..	..	..	Whole life Policy.
C. Standard (e)	1910	28	185	..	37 (h)	..	..	..	231	50	1932	Endowment Policy.
D. London Life (f)	1927	44½	231	48 (j)	106 (i)	176 (j)	206 (j)	38	80 (g)	54	1937	Whole life Policy.
E. London Life (f)	1926	14 (b)	518 (a)	40 (j)	155 (j)	295 (j)	464 (j)	38	982	55	1967	Children's Endowment policy.
F. R. A. Marriage (f)	1912	30	964 (c)	69 (h)	69 (h)	69 (h)	..	..	..	..	..	Whole life policy benefit in income not capital.
G. Br. Mil. Widows Simla. (f)	1912	30	1850 (d)	..	..	..	..	..	..	..	..	Whole life policy.

(a) Not payable till 1933.

(b) 9s. per year extra to cover risk for father's death before 1933.

(c) £. 36 P. A. capitalised at 5% Includes son till 21 & wife till marriage.

(d) Only payable if officer on Indian Estt. at time of death.

(e) Pays commission.

(f) Does not pay commission.

(g) Surrender Value.

(h) Profits actually realised in 20 years.

(j) Profits predicted.

A careful study of this table will still show notable discrepancies in benefits and profits, nor is it possible to draw definite conclusions on these figures in columns 3, 4 and 5. Many factors contribute in both cases. As regards profits some companies opportune a larger percentage of their profits to whole life policies while others make specialities in other directions.

As regards death cover, "G" 'British Military Widows' gives far better terms than any of the others. The benefits in this case are increased by confining their scope to the death of the officer while on the Indian active list. Payment is made almost by the first post on receipt of the telegram announcing the officer's death, and the object is to relieve the bereaved family of immediate financial anxiety at a moment of stress. If the officer survives to retired pay, his premiums lapse. They have secured their purpose. "F" is more of an insurance, but here again the benefits lapse if the wife remarries. Both "G" and "F" are really protection against destitution of an officer's family rather than true investments.

"A" to "E" on the other hand are real insurances. 'B' and 'D' are known as whole life policies and cover one's dependents against death, more especially an early death. Their point is that they give the maximum protection at the outset for the premium given. They are not a good investment for the policy holder himself, as the "surrender value" if the capital is required is not usually so attractive as the sum realisable at maturity on an endowment policy such as 'A', 'C' and 'F'. In these it will be noted that while the amounts as death cover are not great until the profits have mounted up after a term of years quite a respectable sum becomes available on maturity. "A" is the double endowment system, a gamble on a healthy life under which the benefits double if the life lasts out to maturity, in this case to 55 years of age. Double endowments are not now so fashionable as the high rate of income-tax means that the person insured gets more relief from rebate on the higher premium of an ordinary endowment policy. "C" is an ordinary endowment policy, not too attractive.

"E" is a children's policy, one of the best forms of endowing a son. It must be observed that an average yearly premium to obtain cover and endowment of £1,000 without profits may be taken roughly at £1 per year of age. A healthy man of 25 would have to pay about £25 per year, while if he waited till he was 40, his reduced probability

of life would increase the risk taken by the insurance company to a sum represented by a premium of nearer £40 per year. "E" takes advantage of this feature in an endowment policy taken out when the boy was 14, for a yearly premium which will continue through life to be half that payable if he were to wait till he was 28 and take out the policy himself. This policy has other features. It is not always easy to see at 14 what will be the position after the boy's education is finished. He may require cash down to go into business. He may find that the endowment factor is unimportant in view of family expectation and might then prefer to increase death protection by a whole life policy. The main point is, however, that when in due course the boy takes over the management of his own affairs he will find himself in possession of an insurance policy. About half the yearly cost of anything he could then secure himself for the same benefits. The earlier the value of investments and forethought in family finance is brought home to a boy the better, and there is little doubt that the contemplation of his parents' foresight in this policy when he takes over its premiums must prove a real inducement to thrift.

But let not the reader run away with the fact that insurance is the only method of family provision. It is the poor man's method, the device of the Government servant struggling to live on his pay and to guard against misfortune. England expects such men to put down something round ten per cent. of their income to secure the future of their dependents. To those who have private incomes or who can put their hands on amounts to invest insurance is a secondary provision. Much better returns are obtained by profitable, well advised and well considered investments than will ever be secured by the conservative evolutions of life assurance. Similarly for those who have expectations or at least a home for bereaved ones, it is arguable that insurance is not the best form of provision. The fact, however, remains that there comes a time in the lives of 90 per cent. of army officers when the man who does not make definite provision for his dear ones is little less than a crook. We have all gone through the ordeal of subscription to Mrs. X who has been left penniless, and have had to shell out unwillingly to correct the improvidence of a contemporary. Had he thought over the pros and cons now discussed there is little doubt that he would have taken some steps to do the

right thing by his family. Not many officers are wilfully improvident—it is the moment of inertia which brings about their downfall.

The writer's advice to any one who considers the subject may be summoned up shortly as follows:—

Firstly, is insurance incumbent on him? If so, is he prepared to make a study of the subject, involving literature, interviews and statistics? It is an interesting study and will afford an insight into a new aspect of life in London. No technical knowledge is necessary nor are there any mysteries which cannot be examined by the man in the street if sufficiently industrious.

If on the other hand he realizes the need of an expert, and in nine cases out of ten this may prove the wisest course, let him select his expert—men like Sir William Schooling, E. P. Henderson and others of known standing, as will be seen from a study of insurance journals, are not likely to let him down. Let him pay up his $\frac{1}{4}$ per cent. per annum on his premiums like a man. It may save him more in the end, and let him remember especially that in matters like business morality and generosity in paying up of claims, such an adviser has better knowledge than the amateur, as also in the examination of the actual policies themselves which often contain pitfalls.

The above covers a few of the more ordinary pitfalls of army officers' insurance. It does not attempt, nor does the writer, to examine the actuarial problems which confront the professional. Such men have neither the time nor inclination for altruistic dissertations of this sort amounting to a record of more or less bitter personal experience. If the reader can be induced from the above legend, vetted incidentally by professionals, to view insurance with a broader perspective, the object of this article will have been achieved.

SIDELIGHTS ON CAMPS OF EXERCISE.

Delhi, 1875-76 and 1885-86.

By

F. C. M.

[From "The Green Tiger" Regimental Journal of the Leicestershire Regiment. Editor's Address: Glen Parva Barracks, South Wigston, Leicestershire].

There was not much manœuvring at the 1875 camp. It was assembled chiefly to show H. R. H. the then Prince of Wales (later King Edward VII) what a fine body of men the Army of India was composed of. The writer was acting as a galloper, so had a good view of the ceremonial parades.

The troops lined the road from Delhi Railway Station to the Prince's camp, which was pitched on the farther side of "The Ridge," on the ground occupied by the British besieging force in 1857.

The 60th Rifles and the 2nd Gurkhas, or Sirmoor Battalion, were drawn up close to Hindoo Rao's House, the position which they and the Guides Infantry held so bravely under Col. Reid of the Sirmoor Battalion, who was now General Sir Charles Reid, K.C.B., Commanding the 1st Division at this camp.

The Prince stopped at Hindoo Rao's House, and warmly complimented the above regiments on their distinguished conduct. I believe a special standard was presented to the Gurkhas, and they were granted the title of 2nd *Prince of Wales's Own* Gurkhas.

The following extract is from Lord Robert's "Forty-one Years in India," footnote to page 249, Vol. I:—

"The Goorkhas became such friends with the men of the 1st Battalion, 60th Rifles during the Siege—the admiration of brave men for brave men—that they made a special request to be allowed to wear the same uniform as their *brothers* in the Rifles. This was acceded to, and the 2nd Goorkhas are very proud of the little red lines on their facings."

I add another extract from the same book, page 374, Vol. II:—

"The 72nd Highlanders and 5th Goorkhas were brigaded together throughout the campaign, and at their return to India the

latter regiment presented the former with a shield bearing the following inscription :—

“ ‘From the men of the 5th Goorkhas to the men of the 72nd (Duke of Albany’s Own) Highlanders in remembrance of the Afghan Campaign of 1878 to 1880.

“ The gift was entirely spontaneous, and was subscribed for by the Native Officers, N. C. O.’s and the men.

“ In return, the N. C.-O.’s and men of the 72nd gave the 5th Goorkhas a very handsome ebony and silver mounted drum-major’s staff.”

I apologize for this extraneous matter, but one likes to recall how well the British soldier and Jack Sepoy have pulled together, and how his favourite has always been the cheery, sturdy, little “*Gurkhi*.”

The march past of the whole force at this camp, some 17,000 men, was a splendid sight, and was favoured by fine weather. The marching of the 73rd Foot, now the 2nd Bn., The Black Watch, was considered to be particularly good. Their double companies seemed to be at full strength.

The most impressive parade was the inspection by H. R. H. of the Cavalry and Royal Horse Artillery Division. The gallop past, led at a tremendous pace by the Chestnut Battery, was most thrilling. The British cavalry consisted of the 10th, 11th, 13th and 15th Hussars. Their turn-out was splendid. Many of the officers rode handsome Arab chargers. Then followed four Indian cavalry regiments, which I think were the 1st Bengal Cavalry (or Skinner’s Horse—called also the “Yellow Boys” or “Canaries,” from their bright yellow tunics), the 10th Bengal Lancers (Hodson’s Horse), the Central India Horse (all mounted on Arabs imported from the Persian Gulf), and the 1st Punjab Cavalry.

As the Prince inspected the long line, the massed cavalry bands played some very fine slow marches. “Troop” is, I believe, the correct term. The most popular was an arrangement, with variations, of the old song “Take me to London again, the country’s no pleasure for me.” The variations, with roll of kettle-drums accompanying, were especially effective.

I have tried, unsuccessfully, to obtain the music of this “Troop.”

Kipling, in his amusing story of “The Rout of the White Hussars” (embodied in “Plain Tales from the Hills”), states that,

in the above gallant corps, this air was always played by the band when the horses were being watered in the lines. This would appear to be rather hard luck on the band !

Several distinguished foreign officers attended this camp. Their uniforms varied from the plain, semi-naval ones of the U. S. A. officers to the gorgeous turn-out of the two officers of the Russian Imperial Guard Cavalry. The flashing eagles surmounting their helmets so dazzled the chargers lent to them that they were mounted with difficulty. One of the officers was a Prince whom the irreverent British subaltern at once dubbed "O de Whisky," the proper name being quite unpronounceable and unspellable.

The 15th Hussars had a grand circus going. The large tent for it had been presented by a former Commanding Officer, the late General Sir Frederick Fitzwygram. The circus was crowded every evening. The most amusing item was "The unrideable pony." It, I heard, had easily floored two well-known hard riders to hounds, the brothers, Lords William and Charles Beresford. No saddle was provided.

A grand ball was given to the Prince of Wales in the *Divan-i-Khas* or Hall of Private Audience, of the Mogul Emperor of Delhi. The marble walls and delicate arches, all beautifully inlaid with precious stones, looked extra effective when brilliantly lighted up.

Another night H. R. H. was invited to the Camp of the 1st Punjab Infantry (Coke's Rifles) to see the Khuttuck Pathan Sepoys of this crack Frontier Force Regiment dance round a huge bonfire. They whirled round it excitedly with their drawn *tulwárs* (swords), and long Afghan knives flashing in the firelight. The weird stirring music (?) was supplied by Pathan pipes, a sort of clarinet, and a large Indian drum.

Coke's Rifles or *Cook Sahib ki Pultun*, as the men call it, did excellent service during the siege of Delhi in 1857. Its gallant Commander was severely wounded and its losses in both officers and men were heavy.

The 1885 camp was on a much larger scale, and was devoted chiefly to *mancœuvres*. It was the first occasion, since the Second Afghan War, that use was made of properly trained and officered transport. Hired transport had, of course, also to be requisitioned through the civil authorities.

Full dress was taken for the march past. The latter was, unfortunately, quite spoilt by heavy and long continued rain. Many a brand-new tunic was utterly ruined. The pipeclay off one's helmet came down in big sticky drops! Some people thought that the artillery salute, fired as the Viceroy and his staff rode on to the parade ground, caused the clouds to burst. Lord Dufferin in top hat and frock coat sat his horse throughout this long, wet parade.

The infantry marched through a regular quagmire, but, in spite of this, most regiments went past wonderfully well. The best, no doubt, was the 74th Highland Light Infantry. This regiment, I feel sure, was equal to any Guards battalion at ceremonial drill. The men were especially smart in handling their rifles, and their wheel in fours in quarter column at the double was excellent. This is, I believe, considered to be a difficult movement. Those Indian regiments which wore native shoes fared badly, and many shoes were temporarily lost in the clinging mud.

The General Officers Commanding the two opposing Army Corps and their Divisional Generals and Brigadiers no doubt picked up many wrinkles at this camp—a few may have come my way, *i.e.*, to a temporary Brigade-Major. They have, I fear, after this long lapse quite oozed away!

FIRE POWER IN AN INDIAN INFANTRY BATTALION.

By

MAJOR K. F. FRANKS, D.S.O.

(1) "Fire wins battles" said the C. I. G. S. at the Staff Conference, 1927.

An Indian battalion under the new 3 infantry company organization will still be very far short of fire power both as regards Vickers guns and artillery support compared with a Home battalion; yet if Indian infantry are to reach the assault position, they, equally with a Home battalion require adequate protective fire.

(2) Owing to the cost it is improbable that an Indian battalion will equal the protective fire power of a Home battalion for a good many years.

It is therefore essential to improve the situation by making shift with the weapons we have got, even at the risk of straining their rôle as determined by their characteristics.

Field Service Regulations, Volume II, Section 67 (i).

(3) (i) The climax of every attack is the entry of the infantry into the main hostile position and the annihilation of the defenders in the hand-to-hand combat which follows.

(ii) It must therefore be the aim of every commander so to combine the efforts of the component parts of his force as to ensure his infantry reaching their goal in the best possible condition for engaging in the hand-to-hand combat.

(iii) Each body of troops assigned to a distinct tactical operation must be placed under one commander.

(iv) Infantry cannot advance against even semi-organized resistance unless that resistance is kept under subjection by fire power.

(4) There are 5 distinct points in the above which apply to the battalion in attack:—

- (a) The hand-to-hand combat.
- (b) Combination of component parts.
- (c) Object to get infantry fit, into the enemy position.
- (d) One command for a distinct tactical operation.
- (e) Fire power to make movement possible.

Success in (a) is the end we strive for—all the rest are means towards attaining it.

(5) The component parts of a battalion are:—

(i) Fire.

(ii) Bayonet power.

Fire is again sub-divided into:—

Vickers guns.

Lewis guns.

Rifle fire.

Vickers gun fire is the most effective form of fire because its application is concentrated and it is easily controlled and directed.

Lewis gun fire is the next most effective as it is also concentrated in form, but it is wasteful in its present organization through lack of co-ordination.

Rifle fire is the last resort, only to be used when the men can no longer advance without recourse to it.

(6) The method of attack which fits in with the provisions of the quoted extract of section of F. S. R. is a fire plan, organized from the purely fire units of the battalion, aided by the fire from the artillery, so effective that the riflemen can move steadily forward from the starting line straight on to their objective without firing a shot.

It is for this ideal that we must strive.

(7) The difficulties met with in practice are all due to fire plan.

(1) The riflemen have to halt to supplement the fire plan with rifle fire, and then to advance by short rushes; This is most exhausting, and by the time the entry into the enemy's position is made they are far from their fullest fitness.

(2) The riflemen have to halt to allow the fire plan to be moved forward. This is a strain as it leads to nervous exhaustion.

It is therefore to an improvement of fire that we must turn our attention. "Fire wins battles."

(8) It appears to me that the points (b) and (d) in para. 4, in relation to the fire portions of a battalion, are not properly applied, i. e., combination of component parts and, one command for a distinct tactical operation. The failure of the former is due to the omission of the latter through faulty organization.

(9) The organization of a battalion at Home is different in essential features to the organization of an Indian battalion in India. The Home battalion has many more Vickers guns and 2 Lewis guns per platoon. Moreover greater artillery support can be expected.

This different organization affects tactics, wherefore experiments carried out at Home do not apply to Indian battalions.

(10) The Indian battalion will shortly have:—

- (1) A Vickers gun company but still of 4 Vickers guns. 4 more guns may be expected in course of time.
- (2) 3 companies, each consisting of four platoons, each platoon consisting of 1 L. G. section and 3 rifle sections.

Great stress is laid now-a-days on the battalion fire plan and this reorganization is an advance towards making the full use of protective fire tactically possible, when the full number of Vickers guns become available.

It is, however, but a step forward and when the organization of the companies is considered in relation to the new battalion organization, and in the light of the F. S. R. teaching stressed above, it becomes obvious that something further is necessary.

(11) If the ideal attack could be carried through without meeting unforeseen emergencies, (a most improbable thing in war) obviously the ideal solution would be the divorce within the battalion of fire and bayonet power; the provision of covering fire by the Vickers guns and Lewis guns, a distinct tactical operation under one commander, and the riflemen moving forward directly to the assault. However, a single Vickers gun, passed over in the fire plan, would upset that, so that the company commanders must have under their immediate control fire power other than their riflemen, to meet such emergencies.

(12) The dispersion of 12 single Lewis guns throughout the battalion is now anomalous and contravenes at least 3 of the principles of war.

(13) Co-operation is a good word, but the lower one goes in the scale of command the more difficult it is to apply. In order really to co-ordinate the fire of any number of Lewis guns in the battalion in present circumstances, the commander will have to deal with one commander of the most junior rank in the battalion for every gun,

plus his infantry commanders. At the same time, the organization within the battalion is disarranged at a critical time. On the other hand the whole of the battalion Lewis guns cannot be concentrated under one commander.

(14) Once more look at the new battalion organization one purely fire company and 3 infantry companies. A similarity of organization throughout the unit simplifies and unifies tactics, and the reverse is the case.

What will meet the situation, and conform to the battalion organization is, for the Lewis guns of each company to be formed into a Lewis gun platoon, so that the company will consist of 1 Lewis gun platoon and 3 rifle platoons.

The advantages of this organization are:—

- (1) Similarity of organization and therefore of tactics throughout the battalion.
- (2) The fire of the 4 Lewis guns will be directed and controlled by one man, and he a more senior commander—concentration of effort.
- (3) Easier co-ordination of the fire power of the battalion and consequent increase in effect.
- (4) An increase of bayonet strength, as the same number of men will not be required to serve each gun when they are working as a platoon, and the men so released will go to the rifle sections.
- (5) Flexibility in the mounting of the fire plan in attack or defence.
- (6) Simplification of training, when the Lewis guns and rifle sections are under separate commanders. This will lead to improved efficiency.

MILITARY NOTES.

ARABIA.

SOUTH-WEST ARABIA.

There has been little change in the situation at Aden. During August the Zeidis made a few raids against villages between Dhala and Kataba from which they had recently been ejected, and in consequence some local bombing was carried out by the Royal Air Force from Aden. Towards the end of the month, however, there were some indications that the Imam was inclined to resume negotiations for a settlement. The Resident, who proposes to undertake a brief visit to India to discuss various domestic matters, has, therefore, been authorized to dispatch a letter to the Imam suggesting that the latter should send an accredited representative to Aden in October to discuss possible terms.

NEJD.

Sir Gilbert Clayton resumed negotiations with Ibn Saud on 2nd August. During the subsequent conversations the King, although otherwise friendly, continued to challenge the right of the Iraq authorities to erect certain desert posts within their own territory.

In view of this uncompromising attitude negotiations were finally broken off, and Sir Gilbert Clayton left Jeddah for England on 9th August. Since that date there have been some rumours of Akhwan movements in the neighbourhood of the Iraq—Nejd frontier, but, so far, no incidents have marred the truce, which it was agreed should continue for the time being.

BELGIUM,

NOTES ON MILITARY REVIEWS.

"BULLETIN BELGE DES SCIENCES MILITAIRES."

July 1928.

Published by Impr. Typo. de l'Institut Cartographique Militaire,
Brussels. Price, 3.50 francs.

1. *Operations of the Belgian Army, 1914-18. Operations in November, 1914, up to the fall of Dixmude (10th November).*

The Battle of the Yser may be considered to have ended on 31st October. For the time being the enemy observed a defensive attitude on the Belgian front, except on 10th November, when Dixmude was captured.

From 1st November, the German Higher Command regrouped its forces, and maintained opposite the Belgian front only the 4th "Ersatz" Division (3 brigades), the 43rd Reserve Division and the 38th "Landwehr" Brigade, with the Marine Division to ensure the defence of the coast.

During the operations in November, more and more French troops were sent to the British front. From 15th November, relief movements between the British and French were carried out in the Ypres salient, which resulted on 22nd November in the complete taking over of the salient by the French. The British Army then held the front between Wytschaete and the La Bassée Canal.

As regards the Belgian front, stabilized warfare set in after the fall of Dixmude.

The writer then describes shortly the chief engagements which took place on the Belgian front during the first ten days of November. Those between 1st and 3rd November are described on pages 6-14. (To be continued):

2. *The rôle of the Field Army and of the Belgian Fortresses in 1914. (Continued.)* By Lieut.-Colonel Duvivier and Major Herbiet. Of interest.

This interesting narrative of the Belgian Fortresses, continued from the June number, begins by showing the influence of the fortified position of Namur on the 1st, 2nd and 3rd German Armies, during the fighting in 1914.

On 21st August, by order of Von Bülow, Von Kluck was ordered to co-operate with the German 2nd Army, weakened as the latter was by the resistance of the Namur fortified position. Von Kluck considers that he was thwarted thereby in his endeavour to envelop the British Army and strongly condemns Von Bülow's orders compelling him to change his line of march. (Pages 15—17.)

The operations of the German 2nd and 3rd Armies are described on pages 17—22.

The remainder of this rather lengthy article deals with the following subjects :—

- (1) The influence of the last Namur Forts on the German operations. (Pages 23—26.)
- (2) The services rendered by the Belgian troops after their evacuation of Namur, during their retreat between the Sambre and the Meuse. (Pages 26—34.)

Monsieur Painlevé, speaking of the rôle played by the Namur Fortress, said on the 29th May 1927 :—

“ The resistance of Namur, though brief, when opposed to the overwhelming means of assault on the part of the enemy, was the means of allowing the French 5th Army to disengage itself from a very dangerous situation, and at the same time made possible the re-organisation of the allied armies on the Marne.” (Pages 33—34.)

3. *The Utility and the Rôle of Cavalry.* By Lieut.-General de Longueville, commanding the Belgian Cavalry Corps. Of interest.

This is taken from the evidence given by General de Longueville before the Mixed Commission in Brussels, which has lately been reviewing the existing state of efficiency in the Belgian Army, with a view to re-organization.

As a cavalryman he stoutly takes up the defence of the cavalry arm in modern warfare, under the following headings :—

- (1) In covering mobilization.
- (2) In search of information.
- (3) In defence and during stabilized warfare.
- (4) In rearguard action.
- (5) In offence and pursuit (pages 35—47.)

On page 48 is given the opinion of famous commanders during the Great War on the work of cavalry, including those of Lord Haig and General Pershing.

On page 49 an interesting comparison is made between the work of the horse and that of mechanical traction, especially cyclists and troops carried by motor transport (pages 49—51).

The proportion of cavalry regiments to infantry regiments in the European armies at present is given on pages 53—54.

This article is well worth reading, with regard to a subject which is receiving so much criticism in European armies.

4. *Guiding Principles on the Transportation of Troops by Railway.* By Major Lebert. Of interest.

The writer of this article is head of the 4th Section of the General Staff, which has under it the Belgian Railway Troops. He works in co-operation with the Belgian State Railways.

This article is of interest to all administrative staffs, but it is doubtful if it contains anything which is not in the Manual of Movements. The systems described are modelled on the French Army 4e Bureau methods and were well-known to our staff during the war.

Part A of this work deals with "The preparation of a programme for the movement of troops."

Part B.—"Carrying out the movement" and "The density of train movements over varying systems of railway."

August, 1928.

1. *Operations of the Belgian Army during the Campaign of 1914—18. (Continued.) Operations of November, 1914, up to the fall of Dixmude.*

Day of 4th November.

French troops.—Faced by the small results obtained during the 2nd and 3rd November, General Humbert, commanding the 32nd French Army Corps, ordered a far more energetic offensive for 4th November. The troops under his command consisted of the 38th Infantry Division, the 80th Territorial Division and the 42nd Infantry Division; their objectives were to be the general direction of Merckem, Clerckem and Woumen-Clerckem, respectively. These attacks did not fulfil the requirements of the Corps Commander.

Belgian troops.—In accordance with the plans of the Belgian Higher Command for 4th November, the 2nd Belgian Division was to take the offensive in the general direction of Westende and Rattevalle. The 2nd Division succeeded in maintaining a small bridge head on the right bank of the Yser in front of Nieuport; the remaining divisions, the 1st, 3rd and 4th, were only able to make slight progress, owing to the swampy ground, due to the inundations and to the heavy artillery fire of the enemy.

The net result of the Belgian Army operations on 4th November was the temporary occupation of Lombartzijde, which was retaken by the enemy the same evening.

Day of 5th November.

French troops.—General Humbert ordered his troops to continue the offensive ordered for 4th November. Only very small progress, however, resulted. Further south, General de Mitry's force was severely attacked and thrown back on to the defensive.

The 81st Territorial Division had in the meantime carried out their detrainment, and reinforced the French Army group under General Bidon, but for the moment was kept in reserve. An officer from the 81st Territorial Division was sent as a liaison officer to the Belgian 2nd Division, with a view to deciding on a plan for a joint offensive of the French and Belgian troops in front of Nieuport.

Belgian troops.—As a result of the plans proposed for a joint offensive with General Bidon's troops, the Commander of the Belgian 2nd Division informed the Belgian Higher Command that he considered the disorganized condition of his division made such an offensive impossible. The proposed joint offensive was therefore abandoned.

2. *The rôle of the Belgian Field Army and of the Belgian Fortresses in 1914.* (Continued.) By Lieut.-Colonel Duvivier and Major Herbiet. Of interest.

F.—The Belgian theatre of war from the 23rd August onwards.

The first portion of this article sets out to prove that the presence of the Belgian Army in the entrenched camp of Antwerp compelled the Germans to leave in the neighbourhood of Liège sufficient troops to safeguard this important industrial region from a *coup de main* on the part of the Belgians from the north-west. It is to be noted that the only railway line which allowed for the supply and possible

evacuation of three German armies of the right flank passed through Liège.

The German troops in the region of Liège on the 23rd August amounted to a reserve division and seven mixed "Landwehr" brigades, whilst the total of German troops in front of Antwerp and Liège amounted to seven divisions.

If the German troops detained by the fortified position of Namur are also taken into consideration, it is estimated that 14 divisions and one cavalry corps were prevented from participating in the battle of Mons.

The 2nd portion of this article is devoted to showing the influence exercised by the operations of the Belgian Army on the fighting on the Marne. Ten and a half divisions were thus prevented from participating in the battle.

3. *Observed Artillery Fire.* By Colonel Thomas. Of little interest.

Another highly technical study of artillery fire, based on mathematical calculations.

4. *Tanks.* (Continued). By Major Lievin. Of interest and fully illustrated.

B.—*Italy.*

- (1) The Fiat tank (type 2000).
- (2) The light Fiat tank (type 3000).

C.—*Great Britain.*

- (1) The medium tank, Vickers Mark I, Vickers Mark II.
- (2) Very light tanks :—
 - (a) The Martel Morris tank.
 - (b) The Carden-Loyd tank.
- (3) The heavy Vickers tank.

The above tanks are described in detail.

5. *Method for increasing the rapidity of Signal Messages.* By Major Peffer. Of interest.

In this article the writer deals first of all with the existing difficulties of ensuring that signal messages sent by telegraph or by telephone are not tapped by the enemy, and also the tedious process of encyphering and decyphering messages with a view to ensuring secrecy:

He endeavours to find a solution in some method which will considerably reduce the system which has to be employed in transmitting messages and at the same time ensuring their secrecy.

He proposes to employ a system of reference marks per divisional front. The arc of such reference marks is marked on the map by a succession of points, which as far as possible are in straight line and easily distinguished on the ground. The axe is selected as far as possible in the centre of the sector belonging to each infantry division.

The writer, in the remainder of this article, explains further his rather complicated methods.

6. *The History of Engineering.* By Lieut.-Colonel Coppens.

The writer of this article, after commenting on the gradual increase of the Engineer arm in modern armies since 1914, considers that it is of general interest to review the origin of the engineer arm and to trace the successive transformations through which this arm has passed before arriving at the present situation. He hopes by means of this note to show how certain prejudices against the arm have arisen in the past, and to disperse these prejudices.

BULGARIA.

RELATIONS WITH ROUMANIA.

General Angelescu, the Roumanian Minister of War, and Admiral Scodrea, Commander-in-Chief of the Roumanian Fleet, accompanied by other Roumanian officers paid a visit to Varna and the surrounding district where they were very cordially received by the Bulgarian authorities.

In a statement to the press General Angelescu referred to the excellence of the relations now existing between the two countries, which he thought had been enhanced by the recent exchange of public visits.

CHINA.

THE SITUATION.

1. *Civil War.*

It will be recalled that at the end of last month the Chinese forces engaged in civil war in North China were disposed as follows :—

- (a) Northern troops.—Main position on the Lan River with reserve positions on parallel rivers respectively 20 and 40 miles east of this position.

- (b) Southern troops.—Concentrated on a line parallel to and roughly 20 miles south-west of the Tientsin-Peking railway, with troops in occupation of both these cities.

At the end of July the new governor of Manchuria—Chang Hsueh Liang—having accepted Japanese “advice”, announced his determination to maintain his province independent from the rest of Nationalist China. In consequence of this, a force composed of elements from the armies of the various southern leaders was organized to carry on the campaign against the remnants of the Manchurian and Chihli-Shantung troops still within the province of Chihli.

During August little progress was made by this force and only minor skirmishes took place between it and the northern forces. The situation of Chang Hsueh Liang *vis-à-vis* the Nationalists was somewhat modified during the month. The opinion of Chang’s advisers and subordinates was divided: he himself and certain others wished to join the Nationalists, whilst the remainder wished to follow the Japanese advice and avoid contact with the rest of China. In the end, Chang decided on a compromise, whereby he agreed not to join the Nationalists for three months. For the time being, therefore, the anti-northern expedition was abandoned.

Towards the end of August the situation in Chihli was further complicated owing to the raids by Mongolian cavalry against the Chinese Eastern Railway in the north-west corner of Manchuria (*see* paragraph 9). These raids were regarded as serious by the Manchurian authorities, and steps to counter them were ordered. These steps included the withdrawal of a portion of the Manchurian forces still in Chihli, and their despatch by train to a concentration area near Tsitsihar. This movement began just before the end of August.

The possibility of the withdrawal of the Manchurian troops from Chihli apparently gave rise to apprehensions on the part of Chang Tsung Chang that he would be left to face the southern advance single-handed. He therefore took steps to secure a safe line of retreat for himself and those of his troops for whom he could arrange transport.

The success of a local northern general near Chefoo in Shantung Province, reported in the issue of this Summary for July, gave him the necessary opportunity. He therefore at once made enquiries

regarding a safe passage for himself and his staff to Chefoo from Chingwangtao. By the end of August he had already shipped some hundreds of troops with ammunition and supplies, and was actively preparing to ship a further 2,000 or 3,000 to the same destination. The prospect of regaining a footing in his old province of Shantung, no doubt offers a more attractive prospect than is afforded by his present somewhat precarious situation in Chihli. It is doubtful, however, whether he will be able to transport more than a small proportion of his forces from Chihli to Shantung.

2. *Threat to the Kailan mines.*

The British battalion remains in the area of Tongshan guarding the Kailan mines. During the month the situation has remained quiet, though the presence of the ill-disciplined rabble army of Chang Tsung Chang continues to constitute a menace to the safety of the British lives and property in the area. Should Chang Tsung Chang desert the greater part of his army and proceed to Shantung, these troops will be left without even the nominal control which he exercises over them at present.

3. *Kuomintang Party Conference.*

The 5th Plenary Session of the Kuomintang Party assembled at Nanking on 1st August. The conference concluded its sittings on the 17th. Little or nothing of importance was accomplished. Some excellent resolutions were set down on paper to be brought up at the next annual meeting of the Kuomintang due to take place on 1st January, 1929.

The important questions of the disbandment of the armies and abolition of the Branch Political Councils in control at Canton, Hankow, Kaifeng and Peking, have thus been shelved for the time being. For the moment this has resulted in leaving the so-called "moderates"—including such men as Li Chai Sum at Canton, and Pei Chung Hsi of Hankow—in the ascendancy. The extremist elements, however, are by no means inactive. Chiang Kai Shek, whose main hope of retaining power is to centralize control of the various armies and the collection of revenue under the Nanking Government, is being forced more and more to seek support from the extremists, although, as yet, he is reported to have discountenanced the direct resumption of relations with Soviet Russia.

Feng Y Hsiang is holding aloof; ostensibly he is endeavouring to compose party differences, with a leaning towards the moderates.

He is generally credited with being in the strongest position of any of the various leaders, though there are indications that he has quarrelled recently with the Soviet Government, upon whom he has relied for many months for munitions of all kinds.

4. *The Tsinan incident.*

Negotiations between Japan and China regarding the Tsinan incident of last May remain at a deadlock.

5. *Settlement of the British demands for reparation for the Nanking outrage.*

The British Consul-General, Shanghai, proceeded to Nanking on 9th August, on which date he signed "for His Majesty's Minister" three notes and two letters effecting a settlement of the British demands for reparation for Nanking. The agreement follows the general lines of the recent American settlement. The most important item in the settlement seems to be the fact that the Nanking Government have expressed "profound regret" at the incident, and stated that, although it was the work of Communists, they nevertheless "accept responsibility therefor." They declare that they will make full reparation for all personal injuries and material damage suffered by the British nationals.

The Nanking Government also state that they have already taken effective steps for the punishment of the soldiers and other persons implicated, and have undertaken that there shall be no similar cases of violence against British lives or property in the future.

The first instalment of 100,000 dollars (about £10,000) is to be paid by 9th September, and a further instalment of 200,000 dollars within 5 months. A joint Sino-British Commission is to be set up at once to settle claims for damages, and this Commission will be instructed to give preference to individual as opposed to group claims. It has to complete its work in 3 months.

It will be remembered that the original British demands for reparation included —

- (a) An apology from the Chinese authorities accepting responsibility for the outrages, and affording guarantees against further outrages.
- (b) The punishment of all responsible Chinese officers.
- (c) Full reparation for all personal and material damages.

All these demands appear to have been satisfactorily met in the settlement which has just been effected.

8. *China and Germany.*

A Sino-German Tariff Treaty was signed at Nanking on the 17th. It is on the same lines as the recent Sino-American Treaty.

The treaty recognizes China's claim to tariff autonomy, and includes a most-favoured-nation clause in respect of Germany, which gives equally favourable treatment in respect of the latter to that awarded to any other country.

9. *Situation at various centres.*

Shanghai.

No incidents of importance have occurred at Shanghai during the past month. The boycott of Japanese goods is still being enforced.

Hankow.

The situation in the ex-British concession at Hankow is reported to have improved to such an extent that, barring unforeseen contingencies, the half-yearly interest on the municipal debentures (which has not been paid since the concession was rendited) will be paid at the end of the current financial year. It is even hoped to pay outstanding instalments if the expected surplus proves sufficiently large.

Upper Yangtze.

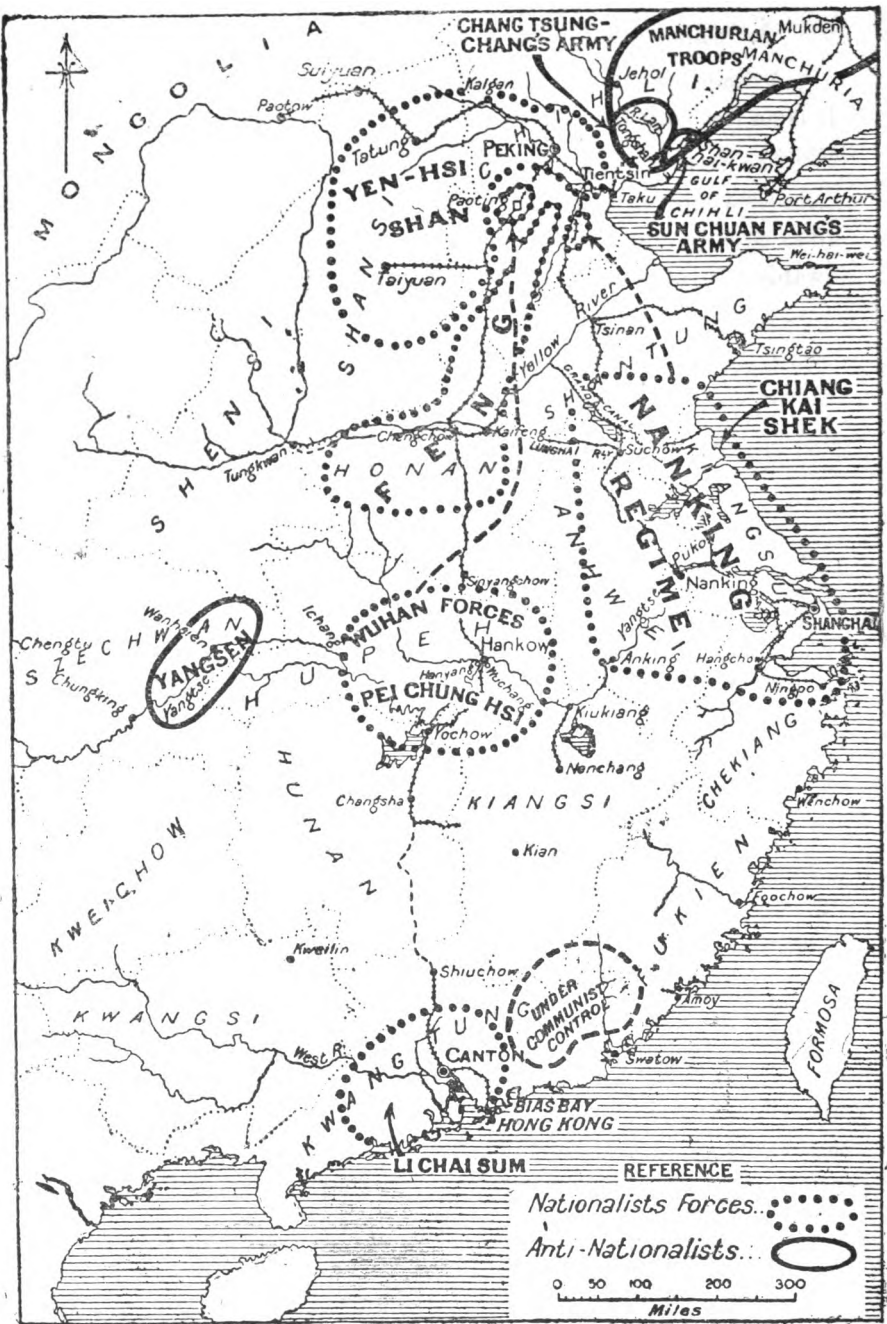
Some fighting of an indefinite nature has taken place during the month between Yangsen and certain local generals in the Chungking area. The situation remains chaotic.

Hunan.

An organized revolt took place in the area between Yochow and Changsha early in August. About 6,000 brigands, consisting mostly of disbanded or mutinous troops, occupied a large portion of eastern Hunan, and threatened Changsha. The latter city, however, was garrisoned by two regiments of loyal Nationalist troops, and was not attacked. It is reported that the brigands have been defeated.

Kwantung.

An outbreak of fighting between Communist bandits reinforced by disbanded soldiers, and Government troops, occurred in Northern Kwantung. The Canton authorities despatched reinforcements to the scene of the outbreak, and the situation is now reported to be in hand.



Sinkiang.

There has been no change in the Province of Sinkiang since the late Governor Yang Tse Hsin was shot dead in Urumchi on the 7th July. The real significance of his death remains obscure, and very little information has been allowed to leak out of the province since his death.

Manchuria.

Early in August a series of raids by Mongolian cavalry were made against stations on the Chinese Eastern Railway in the neighbourhood of Hailar, in the Barga region of Manchuria. For some days the line was cut, and communications between Siberia and Manchuria were interrupted. The Chinese authorities at Mukden ordered the despatch of Manchurian troops to Tsitsihar to deal with the incursion. The origin of the raids and the extent of their success remains obscure. A note on the territory of Barga follows.

EGYPT.**Political Situations.**

In spite of a good deal of opposition the Prime Minister, Mahmoud Pasha, appears to be holding his own and to be progressing with his programme of reforms.

The United States have suggested to Egypt that they should enter into an Arbitration Treaty, and also that Egypt should adhere to the Peace Pact.

FRANCE.**“REVUE MILITAIRE FRANCAISE.”**

August, 1928.

Published by Berger-Levrault, Paris. Price, 5·50 francs.

1. *The Battle of the Avre.* (Continued.) By Commandant d'Argenlieu. (*Part 4.*)

This fourth instalment deals with the fighting on 29th March, 1918, by the VI Army Corps. General Debeney's orders stated that on the evening of 28th March, German attempts to debouch on the plateau west of Montdidier had been checked; the French had had some local successes; the ground held was to be organized with a view to the counter offensive being taken by reinforcing troops. Three further French divisions arrived during the day, and attempts

were made to incorporate details of British artillery and infantry that were still in the area in the defensive organization. The counter-attacks attempted by the French troops failed to materialise. Heavy German attacks which developed in the afternoon led to the loss of further ground, and special measures had to be taken in the evening to ensure the maintenance of contact with the British in the valley of the Luce.

2. *Notes on Napoleon's Battles.* (Conclusion.) By General Camon.

In this, the third instalment, the battles of Austerlitz and Wagram are described as examples of *la bataille-piège* (i.e., a trap). The general conclusion arrived at by the author is that Napoleon did not go straight for his adversary's throat as was taught in France before 1914, under the influence of Clausewitz, but endeavoured to create disorder or demoralization by a threat on his rear before the final attack.

3. *The Crossing of Rivers in Face of the Enemy.* (Continued.) By Colonel Baills.

The author considers that the developments in modern armies which most affect the problem of river crossings are—

- (a) More powerful means of reconnaissance rendering surprise more difficult to attain.
- (b) Increase of fire power and of its range.
- (c) Improved communications and transport facilities enabling the rapid concentration of means for checking the success of the enemy.

Each of these factors is discussed and some interesting figures are given. It is suggested that the theoretical cases described might have occurred in 1918 but for the break-up of the German Army, which prevented an effective stand on the line of the Meuse and Rhine.

4. *Military Memories of the French Revolution.* By Captain Andriot.

These memories are written in connection with recent exhibitions of relics and historical documents connected with the Revolution, notably that held at the "Bibliothèque Nationale" in Paris. Of historical interest only.

5. *A Study of the Offensive Operations for the Conquest and "Cleaning Up" of La Ghouta (Oasis of Damascus), 15th July to 8th September, 1926.* By Lieut.-Colonel Bru and Commandant Cortot.

In January, 1926, the rebels were masters of the region of Damascus. By December the insurrection had been completely broken and order restored. Operations during the year may be divided into four phases—

- (a) 1st January to 4th April. Results indecisive.
- (b) April to July. Troops concentrated against the Djebel Druse.
- (c) 15th to 21st July. Offensive operations leading to decisive success.
- (d) 23rd July to 12th September. The exploitation of success and the "cleaning up" of the area.

The first instalment of the study deals with the period 15th to 21st July. The organization and action of the various French columns are described and some interesting conclusions are drawn.

GERMANY.

Assistance for discharged soldiers of "Reichswehr."

The following are the official regulations for granting assistance to ex-soldiers of the "Reichswehr" on retirement:—

The soldier, on completion of his 12-year period of service, or who, after completing at least 4 years' service, is discharged as unfit, is entitled to assistance. This consists of (1) a monetary grant and (2) a Civil Service Certificate ("Zivildienstschein").

Monetary grant.

(a) *Transfer allowance* ("Uebergangsbühnisse").—A man who has served for 12 years draws this allowance for 3 years after his discharge. During the first year after his discharge this amounts to six-eighths, during the second year five-eighths, and during the third year four-eighths of his last rate of pay.

On discharge for unfitness after 4 years' service this allowance is granted for 1 year only, after 8—12 years' service for 2 years. A man injured on duty may also be granted a pension in addition.

(b) *Transfer contribution* ("Uebergangsbeihilfe").—This is intended to cover the purchase of civilian clothing. It is graded as follows :—

			Marks.
After 4—8 years' service	..	..	500
„ 8—12 years' service	..	..	1,000
„ 12 years' service	..	..	1,500

(c) *Supplementary transfer allowance* ("Zulage zu den Uebergangsgebühren").—This is granted to a man who on taking his discharge renounces his right to the Civil Service Certificate. It amounts to 1,000 marks for each year in which transfer allowance is admissible. Thus a soldier who renounces his right to the Civil Service Certificate after 12 years' service draws a further 3,000 marks.

(d) *Children and wife allowance.*

(e) *Removal allowance* ("Umzugsentschädigung").—This is to cover the cost of removal to a place where the soldier can obtain a situation outside his last station. The move must take place within 2 years of the date of discharge.

(f) While in receipt of transfer allowance a soldier may be granted a special contribution in special cases such as a death in his family.

(g) In the event of a soldier taking up on discharge some independent civilian occupation (other than official employment), the transfer allowances and supplements may be paid to him in a lump sum.

(h) To facilitate the settling on his land or taking up employment in the fishing industry, the State may on demand furnish a guarantee for an amount equal to double the capital put up by the man himself.

Civil Service Certificate.

This entitles the holder to be considered for employment by the State, Provincial or Communal authorities, as well as by other public corporations. These authorities are obliged on application to enrol the holder on an employment register, so long as he is not obviously unsuitable for such employment.

GREECE.

HOME POLITICS.

The Greek General Election passed off without any serious incidents. General Pangalos supplied a certain amount of comic relief by sitting on a balcony overlooking one of the main thorough-

fares in Athens and firing a revolver into a crowd of people who had assembled below to jeer at him, several persons were wounded and it is possible that the General may find himself again under lock and key.

M. Venizelos has gained an immense majority, having secured 224 seats out of a total of 250. The Royalists have been entirely submerged and it looks as if the Republic is likely to become a permanent institution. M. Venizelos is now in a position to do what he likes and certainly if he adopts the foreign policy he outlined at Salonika last month and, as regards internal affairs, carries out a programme of reforms and financial reconstruction, then Greece should be able to look forward to a period of steady progress and prosperity.

BRIGANDAGE.

There has been an outbreak of brigandage in Greece, which resulted in two parliamentary candidates being captured in Epirus. After being kept in custody for several days, and having undergone considerable hardships, they were released on payment of a ransom amounting to about £ 15,000. Following on this the Dutch vice-consul at Yanina and his wife were kidnapped and held to ransom for £ 1,330.

These acts show that a very deplorable state of affairs exists in Epirus, and steps will have to be taken immediately or further incidents are likely to occur. Brigandage on the Greeco-Albanian frontier is more or less endemic, and has in the past involved Greece in serious trouble with Italy. The present outbreak is really due to the late Government, who took no steps to check disorder during their tenure of office. However, M. Venizelos has announced his intention of taking the most vigorous action, so it is possible that something will be done.

MOROCCO.

TANGIER ZONE.

An agreement revising the Convention of 18th December, 1923, relating to the organization of the Statute of the Tangier Zone, was signed by representatives of Great Britain, France, Italy and Spain in Paris on the 17th July.

This Convention is the result of the Franco-Spanish Agreement regarding Tangier, concluded in March, 1928.

The most important provisions of the Agreement are as follows :—

- (i) Italy adheres to the Tangier Convention and obtains representation in the Tangier Administration and Assembly. This should facilitate the government of the zone, as up to now Italian subjects have only been subject to the old capitulations *régime*.
- (ii) Supervision of contraband traffic in arms, in the territorial waters of the Tangier zone, will in normal times be exercised jointly by French and Spanish naval forces. In exceptional circumstances British and Italian naval forces may co-operate.
- (iii) The strength of the native Gendarmerie in Tangier is fixed at 400 for the next 12 months, and must then be reduced to 250. The Gendarmerie will be commanded by a Spanish officer, with a French second-in-command.
- (iv) A mixed Intelligence Bureau will be formed, which will be entrusted with the task of watching all matters affecting the security of Tangier in relation to the neighbouring zones and other countries. This Bureau will be under a Spanish Inspector-General, with a French second-in-command.
- (v) The French and Spanish Governments will each pay annually 350,000 francs to cover the estimated increased cost of the Gendarmerie.

PERSIA.

PERSIAN GULF.

At the end of July a Persian Customs motor dhow seized a boat at the island of Tunb belonging to one of the Arab chiefs of the Oman coast who enjoys British protection.

As a result of protests made at Tehran the passengers and the bulk of their belongings were subsequently released by the Persian Customs authorities, but the Persian Government then proceeded to claim the island as Persian territory and justified their previous action by stating that the boat was engaged in smuggling sugar.

SYRIA.

GENERAL.

The French have experienced trouble with the Nationalist majority in the Syrian Constituent Assembly. The Assembly

drafted a constitution which was unacceptable to the French authorities and the High Commissioner was forced to put forward modifications in various articles affecting the mandate. These amendments were rejected by the Assembly.

On 13th August the French High Commissioner suspended the Constituent Assembly for three months.

TURKEY.

KELLOGG PEACE PACT.

Turkey, along with all the other powers not among the original signatories, will shortly receive notification of the signing of the Pact and an invitation to adhere to it. In official as well as unofficial circles the Pact is warmly welcomed but the Turks are realists and do not expect that it will prevent war any more than previous pacts have done. In any case before coming to a decision it seems probable that Turkey will first consult Persia, Afghanistan and also Soviet Russia, which in itself is a somewhat significant fact.

UNITED STATES OF AMERICA.

MILITARY EDUCATION.

Since the late war, the importance attached to military education by the United States Army authorities has become each year increasingly apparent.

The military education system comprises—

- (i) Military training in civilian schools.
- (ii) Cadet training at West Point.
- (iii) Special service schools for each arm.
- (iv) The Command and General Staff School at Fort Leavenworth.
- (v) The Army War College, Washington.
- (vi) The Army Industrial College.
- (vii) Citizens Military Training Camps.
- (viii) The Army Correspondence Courses.

1. *Military training in civilian schools.*

In 1927 there were 40 essentially military schools and colleges at which military training was compulsory. Students at these institutions wear uniform and live under military conditions. The average course extends over 4 years, discipline is strict and considerable attention is paid to athletics and physical development generally.

In addition to the above there are senior units of the Reserve Officers Training Corps at 184 colleges and universities. These are voluntary organizations, having as their primary object the provision of training facilities for selected students to qualify for appointment as Reserve Officers in the United States Military Forces. Junior units of the same organization are maintained in a number of private military schools and in a few public* schools. The War Department details Regular Army Officers as instructors in proportion to the strength of the unit concerned.

A good example of an essentially military school, though it caters for other professions, is the Virginia Military Institute. It is organized under the laws of the State of Virginia and governed by a board of visitors appointed by the Governor. The full course extends over 4 years, the minimum and maximum age limits for entry being 15 and 22. The average number of cadets in residence is 700, the majority being Virginians. The staff consists of 50 professors and instructors, 9 officers of the United States Regular Army attached for military training, and 7 officers of the Virginia State Volunteers who administer the Institute. The first 2 years are spent on fundamental subjects—at the end of which cadets elect in which course they desire to specialize for their degrees. Degrees conferred by this Institute are recognized throughout all universities of the United States. The average annual cost to a Virginia Cadet is £ 145 and to an outsider or “ Pay ” Cadet £ 186. The entrance standard is somewhat lower than that for Sandhurst.

Cadets wear uniform at all times and discipline is very strict. They are organized as a battalion. About 10 cadets a year pass into the Regular Army, the remainder taking reserve commissions. There are four units of the Reserve Officers Training Corps at the Institute, engineers, cavalry, field artillery and infantry, and necessary equipment for training in all arms is supplied. In their second year all cadets pronounced physically fit, who are citizens of the United States, are required to attend a 6 weeks' summer camp held under the auspices of the War Department and paid for by the State. Stonewall Jackson was for some time an instructor at this institution.

* The term “ public ” as applied to a school in the United States must not be confused with the word as applied to English schools. In the United States the word is used to signify that the school is national or open to the public.

2. *Cadet training at West Point.*

West Point is the only purely military academy in the United States of America. A description will be found in the U. S. I. Journal for January, 1928, pages 214-219.

3. *Special service schools for each arm.*

Schools for advanced instruction in each arm of the Service have been instituted in various parts of the country. A good example of this type of school is that at Fort Benning, near Columbus, in Georgia, the special service school for infantry. It is commanded by a colonel. A course comprises some 260 regular officers and a varying number of National Guard officers. An infantry regiment at war strength, a battalion of field artillery and a battalion of tanks are kept for demonstration purposes. Two hundred horses are kept for the use of officers under instruction. Instruction in schemes appears to be excellent and is given in great detail, and individual study is aimed at as far as possible.

Instruction is divided into a Junior Officers' Course, and an Advanced Course for field officers and senior captains; the former, being both tactical and technical, is designed to teach the functions of company officers and battalion staffs; the latter comprises a refresher course in weapons and tactics of small units, also in the tactics of a battalion, regiment or brigade. Each course lasts about 9 months.

The main object of the school is to ensure uniformity in teaching, so that on mobilization there will be a large supply of competent instructors with uniform training. Very thorough instruction of a high quality is given and amusements and athletics are well organized.

4. *The Command and General Staff, Fort Leavenworth.*

This school corresponds to the Staff College at Camberley.

Until recently the course for officers attending was one year, but this has now been extended to two. There are 200 students in each course, selected by chiefs of arms at the War Department. In exceptional cases the General Staff acts on the recommendations of unit or formation commanders.

Instructional plant is supplied on a very lavish scale, and considerable use is made of the cinematograph in teaching military history, all the necessary films being prepared at the school.

The staff consists of a commandant, assistant commandant, director and assistant director, with five section chiefs each having an assistant chief. In addition there are a number of sub-sections dealing with tactics and technique of the various arms.

The object of the school is to prepare officers for command and General Staff duties. Instruction follows the various War Department manuals closely, most attention being paid to open warfare. The offensive spirit is encouraged, and particular stress is laid on loyalty to commanders.

For the purpose of study, classes are divided into committees of about ten members, and a spokesman is elected by each committee whose reports form the basis of discussions between class and instructor. Values are assigned to all problems and exercises, and solutions are marked as either "satisfactory" or "unsatisfactory." Instructors are not allowed to give any information as to specific marks awarded in any problem, nor is an officer allowed to identify himself with his papers in any way.

Neither mechanization nor chemical warfare is given overmuch attention, the doctrine of the school being that the decisive factor is still the "dough-boy" and his rifle. The course is extremely severe and officers who have not qualified at their own service school, or prepared for it by doing a command and General Staff correspondence course, find it very difficult to keep up and many either break down from strain or fail to graduate. With the return to a two-year course the authorities hope that work will be more thorough.

Special three months' courses are held for officers of the National Guard and Organized Reserves, with the object of providing these formations with a certain number of their own officers trained in elementary staff duties.

There is a fine well-indexed library of 45,000 to 50,000 volumes, with all available facilities for the military student, including current numbers of all the more important military magazines and journals of foreign nations.

The general impression conveyed is that of great thoroughness and attention to detail, but from the methods of teaching and rigid insistence on the doctrine of the General Staff there is a resulting lack of elasticity. Too much attention appears to be paid to one type of war only, and the general system of work and mechanical

method of check tend to create a stereotyped mind lacking in the power to make rapid decisions in the face of unprecedented situations.

5. *The Army War College, Washington.*

This college was established in 1901 by Senator Root, the then Secretary for War, the object being to train mature and specially selected officers for high command and War Department General Staff duties.

The course lasts ten months, from 1st September to 30th June, and is divided into four parts, known respectively as the Command Course, War Plans Course, Staff branch courses, and a study of the department of the Assistant Secretary for War. For instructional purposes the staff is divided into seven divisions, *viz.*, Command, War Plans, the four staff branches and Assistant Secretary for War.

The Command Course covers all the aspects of units larger than the army corps, is taught by means of lectures, studies, and the conduct of "war games", and lasts eleven weeks.

The War Plans Course, covering some six weeks, is concerned with the consideration of past specific war plans, and possible future plans against assumed enemies.

The Staff branch courses are concerned with interior economy, and the administrative and executive aspects of a large command, and the last course comprises the study of the methods adopted by the Assistant Secretary for War in the procuring of all military supplies and attendant details. In addition careful consideration is given to plans for industrial mobilization.

Normally some 65 officers from the Regular Army, and from 6 to 12 of the Navy and Marine Corps, form a course. In addition some 10 from the National Guard and 5 from the Organized Reserves Corps attend for Staff branch courses only.

There is an excellent library containing some 2,00,000 volumes.

6. *The Army Industrial College.*

This college was organized in 1924, its object being to train army officers thoroughly in the economics of war. It is under the direct control and supervision of the Assistant Secretary for War. Originally the course lasted five months; this has now been extended to ten.

Thirty-five officers, including one from the Navy and one from the Marines, form a course.

The staff comprises the commandant, assistant commandant and three instructors, one of whom is a graduate of the Business College.

Students attend such lectures at the War College as have direct bearing on the subject in hand. Inspection trips are made to industrial centres and lectures are given by members of other government departments and various highly-placed civilians. The problems studied cover all questions of supply and consider solutions presented by certain campaigns. A review of the 57 problems for the course 1926-27 indicates that no pains are spared to place the economic situation very clearly before the students, and to help them to see all problems of supply in war with eyes of a trained business man.

7. *Citizens' Military Training Camps.*

The object of these training camps is to give military training to such citizens as come forward for voluntary service. There are three separate courses, termed "Red," "White" and "Blue."

Red.—This course is arranged for those who have no previous military experience, or who desire to combine practical field training with elementary knowledge gained in a Cadet Corps or similar organization. Age limits are 17 to 25.

White.—This course is meant for those who already have qualifications equal to, or greater than, a graduate of the Red Course. Age limits, 18 to 26.

Blue.—This is a more advanced course, and is intended to train non-commissioned officers and specialists of the Regular Army, National Guard and Organized Reserves with a view to qualifying for service as officers in the Officers Reserve Corps. Age limits, 19 to 27.

The camps are open to all able-bodied male citizens, numbers being subject to the yearly appropriation, all expenses being found by the War Department. No specific educational qualifications are required for the Red Course, but candidates must be of good moral character and average general intelligence.

8. *The Army Correspondence Courses.*

The Army Correspondence Courses are designed to provide the citizen soldier with an opportunity for systematic instruction which

will fit him to perform the active duties of his branch in his present rank and will also prepare him for promotion to the higher grades.

Enrolment in the correspondence courses is voluntary.

There is a course for each arm of the service which is prepared in the service school of that arm. There is further a course prepared at the Command and General Staff School at Fort Leavenworth. These courses are printed or mimeographed, as the case may be, at the school which prepares them. They are then issued to Corps Area Headquarters in bulk, the Corps Area Headquarters being responsible for the actual conduct of the courses through its own staff and attached officers, who are allotted this work in theory in addition to their normal work at Corps Area Headquarters. In practice it has been found that at a Corps Area Headquarters the *half dozen* officers who dealt with the correspondence courses had their hands so full that they were really not available for other work.

Correspondence instruction is organized as follows for each branch :—

- (a) *Basic course*.—Basic subjects required of both first and second lieutenants not previously prepared in these subjects and subjects which the officer requires for promotion to, and duty in, the grade of first lieutenant.
- (b) *Company, troop or battery officers' course*.—Tactics and technique covering subjects embraced in the company, troop, and battery officers' course of the special service school of the branch.
- (c) *Advanced course*.—Advanced tactics and technique covering subjects embraced in the field officers' course given by the special service school of the branch.
- (d) *Command and General Staff course*.—Combined employment of all branches and the functions of commanders and staff officers in divisions and in corps based on the instruction given by the Command and General Staff School, Fort Leavenworth, Kansas.

Each course is divided into short sub-courses. This division makes each course sufficiently flexible to meet the needs of the individual student.

The time allowance assigned to each lesson and sub-course is approximate only.

Instruction consists primarily in the assignment of a task, preparation by the student to perform the task, and exercises requiring a use of the knowledge gained and criticisms and suggestions on the student's work by the instructor.

In connection with these courses, it is interesting to note that leading American education authorities seem thoroughly convinced that for theoretical training only, correspondence courses are equal and in some ways, superior, to residence courses.

In a recent year, 23,000 Reserve, 4,500 National Guard and 300 to 400 Regular Army officers entered for a correspondence course. The scheme, which was introduced in 1922, is said to be increasing in popularity.

Conclusion.

The chief impression obtained from a study of the United States military education system is that it is exceedingly thorough and that great attention is paid to detail.

The United States is, in proportion to her wealth, extremely niggardly as regards her military expenditure and maintains therefore, only a cadre army in peace. At the same time, her higher military authorities are convinced that defence, so far as the army is concerned, requires mass forces.

It follows, therefore, that the early readiness for war of the non-regular formations is a matter of great concern to the War Department in Washington. The military education system is intended to provide instruction in peace for the very large number of officers and non-commissioned officers believed to be required on mobilization.

REORGANIZATION IN THE CAVALRY.

In two recent articles Major-General Herbert B. Crosby, Chief of Cavalry in the United States Army, has given some interesting details of re-organization effected in his arm. There is a definite indication of a trend towards mechanization, which has hitherto been somewhat neglected.

The main changes in regimental and divisional organization are—

- (i) The introduction of a machine gun troop in each regiment in place of the former brigade machine gun squadron, which has been eliminated.
- (ii) An increase in regimental organization from two squadrons to three.

(iii) The addition of an armoured car squadron to a cavalry division.

(iv) The incorporation of an air unit in the divisional organization.

(v) Motorization of the divisional train.

A short table showing the strengths of a division, old and new, is given on page 76.

1. *The Machine Gun Troop.*

The new machine gun troop, which eliminates the old brigade machine gun squadron, has 3 platoons of 4 guns each, with a strength of 7 officers and 169 men. The old machine gun squadron had 3 troops of 6 guns each, giving a total of 18 guns to a brigade, whereas now the brigade, with its 2 regimental machine gun troops, has a total of 24 guns. In addition, each machine gun troop now contains an anti-aircraft section, equipped with 3 cross-country cars, with anti-aircraft machine guns mounted on each car, and a 1-pr. section equipped with 3—1 prs. for employment in particular against hostile machine gun nests, armoured cars and light tanks.

2. *The Armoured Car Squadron.*

The inclusion of an armoured car squadron in the division is a new departure. The unit contains a small squadron headquarters, and 3 armoured car troops, with a total strength of 18 officers, 260 other ranks and 36 cars (war organization). So far only 1 troop has been organized, consisting of 3 platoons of 4 armoured cars each, with a strength of 5 officers and 84 other ranks. This is now doing duty with the experimental mechanized force at Fort Leonard Wood.

The cars with which experiments are being conducted are of two types :—

- (a) Armoured car, light, T—1. Weight, 2,500 lb. Engine : Pontiac, 6-cylinder, 40 b.h.p. Speeds, m.p.h. : 1st, 5 ; 2nd 15 ; 3rd, 40. Crew : 1 driver and 2 gunners. Armament : 2—30 machine guns, rear gun on anti-aircraft mount. Cruising radius : 150 miles. The car is armoured against .30 ammunition in front of the driver. It is built on a standard chassis, equipped with 32×6·30-inch balloon tyres ; has 4-wheel brakes and standard equipment ; carries 5,000 rounds of .30 ammunition. The wind shield has been removed and replaced by $\frac{1}{4}$ -inch armour, which is of sufficient height to allow the

driver to look over easily. A belt of armour also covers the back of the front seat. One machine gun is mounted over the wind shield in a position to be served by the gunner sitting next to the driver. The tonneau is open, and has a machine gun mounted on it ready for fire against aircraft or ground targets. In view of the absence of armour on their flanks it is likely that the crew of this vehicle will have to suffer for the good all-round view they obtain.

- (b) Weight, 5,500 lb. Engine, la Salle, 8-cylinder V-type; 60 b.h.p. Speeds, m.p.h., 1st., 5; 2nd, 20; 3rd, 45. Crew, 4. Armament: 1—.30 machine gun. Cruising radius, 150 miles. This is a completely armoured car with a folding armoured top which can be closed so as to afford overhead protection. The armour is $\frac{1}{2}$ inch thick and proof against service bullet at all ranges above 80 yards. The car carries 7,200 rounds of .30 ammunition and a sub-machine gunner is seated next to the driver. There are ports in the armour for pistol or rifle fire. The car is built on 125-inch wheel base 1928 chassis, equipped with disc wheels taking 32 by 7.5 inch balloon tyres. The machine gun can be elevated above the level of the roof. Probably 1—37 mm. gun will also form part of the armament. The total height of the car from the ground is 72 inches.

3. *The Air Unit.*

Previously a squadron was attached to a cavalry division when the situation required it, but this has proved unsatisfactory and a divisional air arm has now been incorporated into the divisional organization for both war and peace strengths. The unit is identically the same as the one included in the infantry divisional organization. It is to be remembered that in the United States the air force forms part of the army.

4. *The Divisional Train.*

Under the old organization a divisional train included a headquarters, two wagon companies and four pack trains (with 60 wagons in a company and 50 pack mules in a train). The new organization substitutes one motor transport company for one wagon company in

peace, and two motor transport companies for one wagon company in war. This addition of motors to a divisional train has greatly increased its radius of action wherever suitable roads exist. It is to be noted that a divisional train is now partly mechanical and partly horsed.

5. General.

Tests are being carried out with a view to replacing the present rifle with a semi-automatic shoulder rifle, which it is considered will be particularly suitable for cavalry. No particular type has yet been decided on.

Conclusion.—The re-organization is notable for the increase in the size of a cavalry division from 7,463 to 9,760. The increase is due to more than doubling the strength of the artillery, the addition of an armoured car and an air unit and a general strengthening of most units. The changes give the division marked additional fire-power and portions of it will have much greater mobility but the formation as a whole will not be more mobile than before.

Cavalry Division.

Old war strength.				New war strength.			
Divisional Headquarters	..	28	.. ..	.. ..	..	27	
Special Troops	.. ..	324	.. ..	.. ..	..	555	
Battery of Field Artillery	.. ..	760	Regiment of Field Artillery			1,717	
Armoured Car Squadron	.. ..	—	.. ..	.. ..	..	278	
Battalion of Combat Engineer's		345	.. ..	.. ..	..	359	
Divisional Air Service	.. ..	—	.. ..	.. ..	..	227	
Divisional Train	.. ..	263	.. ..	.. ..	..	420	
Medical Squadron	.. ..	63	.. ..	.. ..	..	233	
		+308					
Two Cavalry Brigades	.. ..	5,372	.. ..	.. ..	..	5,944	
		<hr/> 7,463				<hr/> 9,760	

N. B.—In peace the United States Cavalry consists of 18 regiments (of which 3 are inactive). There are only two organized divisions, each of two brigades.

CORRESPONDENCE.

The Great Pyramid and its purpose.

The letter below and the notes on the left hand side of the page are Mr.

Davidson's replies to the copy of the Review sent him by

Lt.-Col. Routh in June 1928.

47, Park Square, Leeds,

8th August, 1928.

D. Davidson, M. C. M. I. Struct E.,

Consulting Engineer,

Hydraulic Structural.

LIEUT.-COL. G. M. ROUTH, C.B.E., D.S.O.,

Chief Ordnance Officer, Rawalpindi, INDIA.

DEAR COLONEL ROUTH,

Many thanks for your letter of 26th June enclosing your review of my book. I was very pleased indeed to receive your letter and to peruse your review, the latter of which is the fairest, and at the same time, the most searching of any review I have hitherto read. Allow me to congratulate you upon the manner in which you have seized upon the essential points of criticism.

I presume you have a marked copy of your review with the reference numbers in the margin as in the copy sent to me which I am retaining. I am, however, sending you notes on the various points you raise numbered in accordance with your review. I am enclosing a copy of my Albert Hall address giving a general outline of my exposition. Enclosed also find a reprint of my last two series of *Morning Post* articles. You will see on the last page of this I have added a note with reference to current events since 29th May. I am not prepared to say more than this until I publish the final results of my analysis. These results are already sufficiently startling.

I hope to hear from you again.

Yours sincerely,

D. DAVIDSON.

QUERY.

1. I take it the collapse of Tsang Tso Ling in May is significant?

REPLY.

(By D. Davidson).

1. The collapse of Tsang Tso Ling is one of many significant happenings. But there are many vital series of occurrences of which contemporary journalism has not yet seen the significance through failure to correlate, but which began on 29th-30th May. This I am showing in a series of statistical abstracts and graphs that I am preparing in conjunction with a chronological statement of distinctly related occurrences in definite series in every sphere of life. I am not yet prepared to make this public and will only do so when my case is definitely made out to the satisfaction of the average intelligent person. All I can say at present is that my analysis shows rapidly developing cracks in the fabric of civilization. I will forward you a statement in due course.

QUERY.

2. I should imagine that at least a proportion of the discoveries of the modern science would prove rather contrary than corroborative. The neutral reader would like to weigh up such facts.

REPLY.

2. I can only speak *re* astronomy and geodesy (with related geophysics) in the pyramid. No line of investigation that I have followed in these sciences in relation to the Pyramid but has been reducible to Pyramid terms of mathematical expression. The proof of intention in all cases has been supplied by independent

Very considerable interest is being taken in England at the present time in what is alleged to be the Divine prophecy concerning the future of the British race embodied in the Pyramid passages. The particular point on which attention centres at the moment is the definite prediction that Armageddon or circumstances involving an eight years' world war of greater intensity than the last is to commence at mid-night 29-30th May 1928.

THE ARGUMENT.

It is argued that the Pyramid is a "Bible in Stone" and that the dates and details agree exactly not only with Bible prophecy, but also with the sacred books of the Egyptians, written at a time when the more than human science of the Adamic race was still preserved by the Egyptian priesthood. The inferences are said to be confirmed by the extraordinarily accurate astronomical facts emphasised in the whole structure, facts only capable of verification in the present century.

ITS PRESENT INTEREST.

The reason why the subject attracted so much notice in the last ten years is the flood of light which has been shed by archæologists "in the latter days" in analysing the sacred writings in hieroglyph and cuneiform.

The above claims appeared to the writer to justify investigations, and the results of certain necessarily imperfect enquiries into facts ascertainable are set forth below.

HISTORY.

Ever since the Caliph-Al-Mamoon quarried a way into the pyramid passages early in the 9th century, there have been many

check data expressed in the same terms, but as a check indication of the Pyramid's data and not as a direct function of the original demonstration. This statement applies to many more results than I have been able to publish.

I know of nothing in science that disproves or disagrees with a single Pyramid result.

REPLIES.

3 & 4. This is very mildly "personal" when compared with statements of a distastefully personal nature that have been made, with the best intentions possible, by others, so please do not worry. What you say is true.

Although circumstances rather compelled my work than any personal purpose. Browning says somewhere and somehow that one is compelled to do a necessary task by some volition stronger than one's desires or ambitions.

5. The results of the 1925 Survey are very badly published. No actual survey data are given, only the definite results of the survey data. The stated base square circuit as defined by the prolongation of the existing base casing edges to intersection, however agrees with my displacement Circuit. On my Plate 4 (last *Morning Post* articles) I reduced the results to co-ordinates off the centre of the base, as this is the only precise method of statement for the positions of

who thought that their unexplainable formations symbolised some hidden prophetic purpose. Napoleon had measurements taken, and various other investigations were carried out. But the first scientific attempt made was by Professor Piazzi Smith, Astronomer Royal of Scotland, in 1865, followed by many others, including Civil Engineers.

The first really connected argument identifying the Grand Gallery (see plates) with the Anglo-Saxon Christian Dispensation was published by Col. Gardnier, R.E., in 1905. The present position of the science is due mainly to the monumental labours of Mr. D. Davidson, MC, Mi Struet E, who has given up his lucrative prospects in the engineering world so as to study Pyramid records. His enquiries have demanded a knowledge of architecture, astronomy, and mathematics and archæology, not ordinarily attainable by any one man, and Davidson has been so convinced of the worthiness of his cause that complete elucidation of the riddles and symbolisms of his "Bible in Stone" has become the one purpose of his life.

THE CASE AGAINST.

On the other hand there are aspects of the subject which rather discredit the many convincing features put forward. The Egyptologists as a whole are sceptical and base their objections on several presumptions, each of which is refuted by Davidson. They find that the dimensions of the Pyramid base on which many measurements are based, are upset by the recent (1925) Egyptian Government Survey. This Davidson meets by reckoning the

the existing base casing edges. I had no difficulty in co-ordinating the Survey results with the geometry. Although there is a slight discrepancy between the 1925 5. and Petrie's Survey it is scarcely appreciable. The conditions of work in the two surveys make the 1925 results more reliable than Petrie's although Petrie's methods were better. Petrie admits the new results. They also agree perfectly with my Displacement 6. Circuit, whereas Petrie's show a slight deficiency in circuit.

6. I have shown in "Early Egypt, Babylonia and Central Asia" that the Pyramid date can be obtained from the earliest king list and that the essential elements of chronological connection exist in Manetho's later list.

7. Quite a number of eminent scientific authorities have been convinced by the scientific sections of my work. One eminent continental authority tested all 7. the mathematical and astronomical principles and processes without finding a flaw anywhere. I am not at liberty to give names as few scientific authorities in sympathy with my work can afford to identify themselves publicly with it. One Egyptologist of international repute indeed has said that my work is the most comprehensive ever published on the Pyramid, that my arguments and conclusions are stated as clearly as they possibly could be, and that future authorities will have to take increasing notice of my work and its conclusions.

One effect of my work has been to give new faith to many clergymen who specialise in science. Quite a number of these have in consequence left the modernist movement (in the church) to

difference as a phase of his "displacement" theory, to be discussed later. Egyptologists, headed by Sir Flinders Petrie, who surveyed the Pyramids officially and has written much on the subject, maintain that the Pyramid was a tomb, which Davidson denies with very convincing arguments. They also point out that the Egyptian king lists, which Davidson says were forged 6. by the Egyptians themselves in Pholemy's times, do not fit in with the Pyramid dating.

The fact remains that so far as can be traced, few well known men of science have lent their names and reputations to support 7. the theories, and it is also true that certain sections of rather advanced British-Israelite propaganda have adopted the cause as their own.

which they had attached themselves.

I am constantly meeting leading scientists whom, in conversation, I find to have an intimate acquaintance with my work and to adopt an attitude of tolerant expectation towards it. The general attitude seems to be that although the work is sound as a scientific presentation the conclusions to which the presentation leads are too staggeringly impossible of acceptance *on the present materialistic basis of science*. In other words, they expect "there is a *snag* somewhere." Now I know from my own experience of much testing, checking and counterchecking that the *snag* is not in my own work. I might venture the opinion that the *snag* lies in the materialistic basis of modern science.

I agree that much British-Israel literature is of an uncritical and credulous nature. There are, however, exceptions, notably the expositions of my collaborator, the late Dr. H. Aldersmith. My own belief as to the destiny of the British race is best outlined in the *Morning Post* Report of my Royal Albert Hall address, a copy of which I enclose.

8. I think you will agree that in my own works Pyramid evidence, scientific evidence, and archæological evidence are discussed independently of scriptural evidence, Roman Catholics are as much at home in studying the Pyramid as British-Israelites are. Scripture is of Universal appeal and so is the Pyramid. I do not postulate that the Pyramid is the "Bible in stone" I prove it to be such. Nor do I identify the Pyramid with British-Israel these. The Rev. C. C. Dobson,

Most of the literature on the subject has a religious savour, and is interlarded with texts and assertions postulating the blind acceptance of Holy Writ as part of the argument. Most intelligent research in this century prefers to base its enquiry on logical proofs rather than neurotic postulates.

The above are serious points of disagreement and should be borne in mind in perusing the "case for the defence."

STUDY OF THE SUBJECT.

After reading pamphlets on the subject by the Revd. Dobson and Basil Stewart, which referred points of doubt to "The Great Pyramid, its divine Message" by Davidson and Aldersmith, the

whom you mention, accepts my work without accepting British-Israel teaching. Basil Steward accepts both.

9. As to "the immense mass of unsystematised information," I think I can satisfy you *re* this. My work is the first of its kind. It is a pioneer work in which unsurveyed territory is mapped as one blazes the trail. The data I had been collecting for years had to be presented stage by stage in literary form before successive stages of demonstration could be attempted. For 14 years difficulties seemed to be insuperable, until I hit upon the plan of solving my problems stage by stage in the course of writing the book itself.

The process of the work is analogous to that of a geodetic surveyor in the jungle. The survey data are collected without the surveyor realising the formulation as a whole until he has completed his task and has plotted his data in map form. In studying my work the reader is following the original survey lines. For this reason I find that those who understand my work and see order emerging out of apparent disorder are mostly of my own profession,—Civil Engineers. I proceeded on lines of investigation peculiar to my profession, and which, in my opinion, are the only lines of investigation to adopt in relation to difficult matters of co-ordination in cognate knowledge. Of course you will understand that 14 years work of this nature could not be seen in the ultimately clearest perspective, even by myself, until sufficient time had elapsed for the essential features of the "map" to be

writer studied this last, and was amazed by the immense mass of unsystematised information thrown at the reader's head.

While able to follow more or less the various proofs advanced, the present writer felt that the failure to make a clear cut case by such an obviously able exponent could only mean that the exponent was not himself convinced. This impression was somewhat altered by the series of articles in the *Morning Post*, 17-22 October 1927, which gave a much more connected argument, if not an entirely convincing one.

separated boldly from the mass of detail that made "mapping" possible. The "map" is now quite clear to me and I have endeavoured, I hope with some success, to represent its essential features in my 1927 and 1928 *Morning Post* articles.

10. I agree that there is a definite "manifestation of thought transference" from sources external to our physical universe. Few ordinary experiences in research can be satisfactorily explained otherwise. One does not need to venture into the realm of psychic research to realize this.

11. The clearly definite "map" resulting from my own survey indicates the Great Pyramid as a special revelation from the Great Architect of the Universe.¹¹ Compared with this revelation, the ordinary psychic communications of modern times are of a very low order.

SUPERHUMAN AGENCIES.

It is now accepted by the world of science that certain manifestations of thought transference and occult suggestion definitely exist in our Kosmos, impressions which if not "revelations" have been so often and so categorically recorded that even the plain man must now admit that psychic factors have to be reckoned with.

The Pyramid enthusiasts go further, and say that many of these factors are the manifestations of a Divine will, and that the stored up and inspired knowledge of the "chosen" Adamic race is perpetuated in a "Pillar of Stone," and that the impulse to build this monument was a kind of super inspiration of greater and more considered purpose than the comparatively minor promptings as recorded in psychic research and in historical episodes.

PROOFS ADVANCED.

In his "Great Pyramid" (Williams and Norgate, 1926, 30 shillings net) Davidson lays himself out to prove that:—

1. The Pyramid is a geometrical representation of the mathematical basis of the science of a former advanced civilization.

2. That in the Pyramid this knowledge was condensed into a formula analogous to Einstein's theory, and that this knowledge pervaded all branches of that earliest civilization.

3. That the independent Egyptian civil records, *e.g.*, Manetho's "Book of the Dead" and pre-messianic records define the geometrical dimensions of the Pyramid, the units of measure, and the allegorical symbolism and purpose of the Pyramid's construction. He maintains that the agreement of these various authorities and their harmony with biblical prophecy is confirmed by Sir Flinder Petrie's works and his official survey.

4. He considers the passage system to be an elaborate graphic representation of prophetic chronology, "intimately related" to biblical prophecy, and giving so many definite dates of important events in Messianic history as to disarm any suspicion of systematic fabrication.

5. He brings out that the final time of tribulation for which the Pyramid record was predestined, is now upon us.

6. He argues with some plausibility that the whole record has been enshrined, so to speak, in amber, against the time when the British race, the makro-eephalic Adamic type should fulfil its destiny. This race was to preserve its identity through the changing evolutions of many centuries to become, after a life and death struggle against Russian hordes, the final survival of the chosen people, a people not necessarily Jewish or even the seed of Abraham, but the Adamic stock which for so many centuries preserved the knowledge of the Egyptian priesthood.

12.

12. As to the British race and its destiny refer to my Albert Hall address enclosed.

His main contention in favour of this view is the British 1 inch, the only scientific measure of any antiquity now surviving. In confirmation he adduces many con-

13. See my replies 7 and 12.

tributary facts from prophecy and Egyptian sacred records which have considerable bearing on the subject.

13. It is his misfortune that many of these sometimes circumstantial and at others rather specious arguments have been used *ad nauseam* by the British-Israelites, to which cause he is to some extent sympathetic but quite independently of his Pyramid reasoning.

SCOPE OF DAVIDSON'S WORK.

Davidson divides his work of 700 pages (11" × 7" with 70 plates and 67 tables) into five chapters, of which each is in three parts, the first (so called) argument and narrative; the second and third parts, to be read at the second reading, accessory and explanatory.

Chapter 1 covers ancient metrology, founded on the functions of the earth and its orbit, with the solar year as the time unit and the British inch, a 500 millionth part of the earth's polar diameter as the linear unit. The last was the basis of Egyptian metrological texts and of the Hebrew cubit. The Pyramid is represented as a sort of super-calendar and index of sowing dates to the ancient Egyptian world, and to be the superhuman design for other sun calendars such as Stonehenge, perpetuated in other climes by the wanderings of the original Adamic race.

Chapter II shows that the Pyramid's exterior was based on gravitational astronomy. The author introduces his "Displacement" theory, that universal defect in human as opposed to Divine effort, which is emphasised in all Messianic (and Islamic) legend, but is here portrayed in

14. The parent Adamic civilization became extinct but its expression in its worldwide settlements continued as the backbone of all ancient cultures from 4000 B.C. onwards. See my Albert Hall address for outline *re.* successive "outcroppings" converging as a single composite "outcrop" in modern British civilization.

many unmistakable forms as a lasting record in stone. This "Displacement" figure (286, 1022 P") is said to supply nine different astronomical values with the accuracy of modern astronomy, and to account for the difference from the theoretical dimensions of the Pyramid's base as compared with the dimensions actually found in the recent Government Survey.

Chapter III refers to the internal passage system as a graphical exposition of gravitational astronomy confirming the external proofs. The application of the zero date for prophecy is brought out in its relation to modern astronomical facts.

Chapter IV shows how the Pyramid records synchronise with the regular writings of Egypt, Babylon and Israel. The idea in the author's mind is that a highly cultured race "in the image of God" was cradled more than 6,000 years ago "somewhere in Central Asia," and driven by economic facts out of Eden into the then populated centres of a lower culture. Thence they dominated the races they met, either as priests or kings, and retained much of the semi-divine knowledge of their early existence. Their wanderings left relics of their culture in the widest latitudes—Britain, Africa, and even America, but the race gradually became extinct and with it the knowledge and civilisation which was admitted as extant in Moses' time among the Priesthood.

The author brings many cross facts to confirm his reasoning, and has since brought out a further volume ("A connected history of early Egypt, Babylonia and Central Asia") on this aspect of the problem.

15. I had completed my case from literary sources for the Central Asian Cradle of the race in Chinese Turkestan before I had studied the geological evidence and the results of Sir Aurel Stein's explorations. The geological evidence and Stein's confirmed my inductions and detail. Waddell's work later filled in the details *re.* "outcroppings" of the race from 3506 B.C. to the present time.

16. Your criticism here is quite justified, but, as I have explained in reply to 9, I had no other alternative. The reader is following with me the blazed trail of the Pioneer. You, of course, notice the difference in the *Morning Post* articles, due to my subsequent study of my very detailed survey.

17 & 18. Yes, I think you have covered the main points very well indeed.

In this respect his views are curiously strengthened by Sir Aurel Stein's explorations in "Tekla Mekan," the ancient Kashmir Valley of Central India, and by Waddell's enquiries into early Sumer Aryan language and civilisation in Syria.

The fifth chapter identifies the first eleven chapters of Genesis, and the records of the early Egyptians, as one and the same story, and classifies the various names such as Seth and Enoch as dynasties having their exact counterpart in early Egyptian king lists. Then follows a very careful comparison of dates both past and future by the different interpretations, secular, allegorical and astronomical, painting in the circumstantial conditions of the various epochs.

Such is the scope of Davidson's rather imposing work, but with it all one feels that an author with the serious grasp of his subject shewn, ought to be able to put forward a more convincing story. Even a table of contents would be valuable, but at present the reader flounders through an impossible maze of facts, and cannot see the wood for the trees. This is as stated less noticeable in the *Morning Post* edition in October 1927.

POINTS IN FAVOUR.

Now to discuss some of the main features said to support a super-human origin of the Pyramid.

(a) The site was ten miles from the quarry, and according to Herodotus, this involved 100,000 workmen relieved quarterly for ten years work bringing the five million tons of lime stone, and the granite blocks from Syene, 500 miles up the Nile. Many of the latter weighed over 60 tons,

Plate I

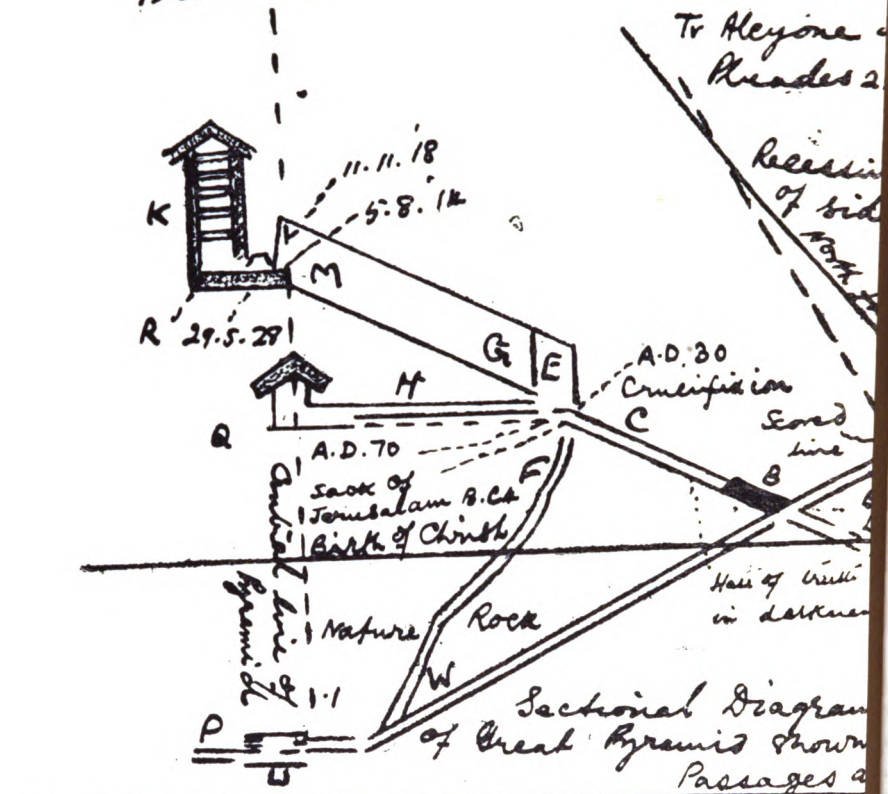
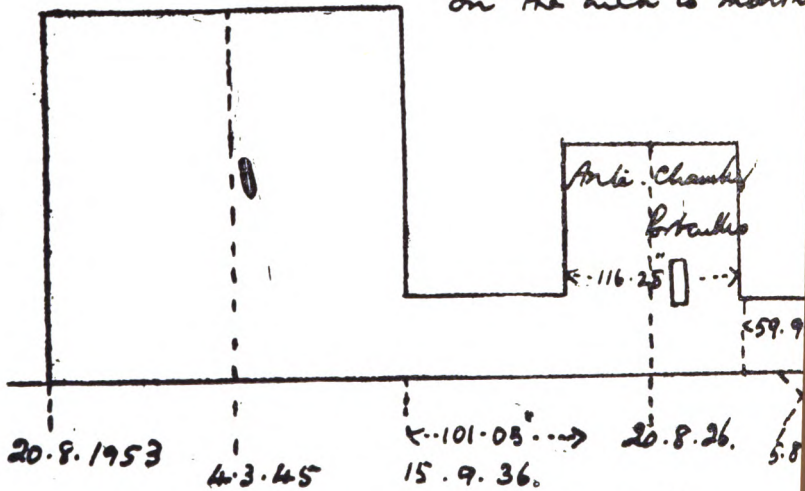


Plate II

Enlargement of Portion
on the side to north



29.5.28
Diagram of Ant. Chambers and King's Chamber

and had to be raised hundreds of feet to be placed in position to support the roof of the Kings' Chamber.

18. (b) The structure of the Pyramid is clearly proved to give in its dimensions, trigonometrical and integral functions, the following facts :—

(i) The solar, sidereal and anomalistic (date between equinoxes) years, to decimals of a minute.

(ii) The mean sun distance 92,996,825, miles as against the latest astronomical figure 92,998,000.

(iii) The value of " II " to six places of decimals.

(iv) The formula for the annual rate of the precession of the equinoxes for the Pyramid datings 4699 B.C. (Zodiac Zero) to 2045 A.D.

(v) The English inch, originated in Anglo Saxon civilisation and the Hebrew cubit.

(c) The orientation with exact reference to Alpha Draconis, the Pole Star in 2144 B.C., the date of construction, as confirmed by other features.

(d) The absence of hieroglyphics or inscriptions as found in every other ancient monument of the sort in both the old and new worlds and the strange unaccountable construction of the passages.

The interpretation put on these passages by Pyramid scholars is too plausible to be lightly dismissed.

ABP is said to represent the natural moral destiny of man to the bottomless pit at P. BE is represented as the narrow progress of the Jews from the date of the Exodus (at B) to the death of Christ at E, when a larger and broader period of progress commences. The zero date of calculations is the junction of the

line M.G.E.B. with the extension of the side of the Pyramid into the ground. This date, at an inch to a year, is 4000 B.C. The huge blocks of pink granite in which these measurements are preserved, are so carefully cut, with the precision of watch making, that it is difficult even to see the joints.

On the same inch to a year measurements, the great step at M is dated 1844, the beginning of the "time of the end." In this late stage, the signification of the inch acts, dating on the month scale from August 1909.

THE PROS AND CONS.

These are a few dates. There are others, such as would be selected by a historian when picking out salient points in Messianic history. It is of course only possible to prove those after the event, but it is at the same time difficult for even the sceptic, if fair minded, to bear out the thesis that all the dates so found have been worked up to fit in with the known facts; and even if the most plausible intersections of ordinates, perpendiculars and normals have been cooked, the coincidences are too numerous and too striking.

There are certain indications that the Pyramid's allegory, if it has any signification at all, refers to the period 1844 A.D. to 2045 A.D., and it is urged by the enthusiasts that the important part of this period, from August 1909 to August 1953 would naturally have an enlarged scale, in the same way as a map of England would give an enlarged plan of London. This point of view is nothing if not specious, and is sufficiently plausible to justify provisional acceptance as a basis of argument.

QUERY.

I find this the best argument for sceptics. A precis of such inter-sectional dating would form a most valuable part of any prefaces.

REPLY.

19. I agree, but one has to give a very personal account of one's own experiences to make this really convincing to the sceptic. I can do so better in conversation than I can in print. One has to live experiences to know their value. Communication of the essential atmosphere of sincerity can only be made in personal contact. I know my work is correct because of my astonishing experiences in the course of my following correct line of *induction*. It is difficult to write of those, but one opens out in the proper company and can give a clearer outline than any scientific analysis in print can show.

The various passages, which are very exactly described under the allegorical names in the Egyptian sacred books, are all inter-connected. This specially applies to F.Q., symbolising Jewish progress after B.C. 4, the date of the birth of Christ. It was this date of the birth of Christ, confused in Egyptian writings with the passion of Osiris, which led astray investigators like Piazzzi Smith in the Sixties. The error of four years in this basic date (as known in those days) deprived the Astronomer Royal of Scotland of all the convincing date intersections which have lent such interest to the investigation of to-day. It is noticeable that perpendiculars upwards from definite constructional points in this (Jewish) passage, coincide with other definite points on the "Christian" record, *e.g.*, the date of Allenby's entry into Jerusalem on 11th December 1917. In this connection it is significant that Dr. Grattan Guinness, writing in 1878, and working on Biblical prophecy, predicted this year 1917 as an important year for the Jews and the end of the Ottoman Empire.

It is also either convincing or represents a very remarkable ingenuity in interpretation, that the various normals and co-ordinates to the various surfaces in the passages, whether ceiling or floor, do indicate various dates on the inch scale, in nearly every instance of definite import in the Christian era. In other cases integration of the various functions produces coincidences of datings and confirmations of other dating which are often too surprising to be accidental, even to the sceptic, and even with the

full knowledge that the integral calculus is a development yesterday.

THE PROBLEM AS A WHOLE.

It is of course quite impossible in a short review of this sort to do more than touch the fringe of a very big subject on which a great deal has been written. There is no doubt however that to the man with an enquiring and a mathematical mind there is much food for thought. Enquiry cannot fail to convince the student of a very advanced prehistoric civilisation, but whether the facts indicate prophetic symbolisms and divine revelations is a matter which each must judge for himself. It is very difficult to account for all the scientific disclosures and dates of coincidence on purely human agency, and the attempt seems worthy of some of our foremost scholars.

BIBLIOGRAPHY.

ANCIENT AUTHORS.

Herodotus (B. C. 445), Bk. II, Sects. 124, 134 and 149.

Diodorus Siculus, Bk. 1, Ch. 63.

Strabo, Bk. XVII.

Pliny, Nat. Hist., Bk. XXXVI, Sect. 16.

MODERN AUTHORS.

Greaves, John, Savilian Professor of Astronomy at Oxford.

Pyramidographia, or a Description of the Pyramids in Egypt (1646).

The Origin and Antiquity of our English Weights and Measures (2nd Edit., 1745).

Newton, Sir Isaac :

Dissertation on the Cubit.

Vyse, Col. Howard :

Operations carried on at the Pyramids of Gizeh in 1837 (2 Vols., 1840).

Taylor John :

The Great Pyramid Why was it built, and who built it? (1859).

Smith, Professor C. Piazzi : Astronomer-Royal for Scotland.

Life and Work at the Great Pyramid in 1837 (3 vols., 1867).

Our Inheritance in the Great Pyramid, 5th Edit., revised.

Petrie, Sir W. M. Flinders :

The Pyramids and the Temples of Gizeh (1883) abridged edition, 1885.

Inductive Metrology.

Weights and Measures, in Enc. Brit., 11th Edit.

History of Egypt, Vol. 1, 10th Edit.

Proctor, Richard A., Editor of *Knowledge*, *The Great Pyramid : Observatory, Tomb and Temple*.

Adams, W. Marsham :

The Book of the Master.

The House of the Hidden Places.

Lockyer, Sir J. Norman :

The Dawn of Astronomy.

Stonehenge.

Cole, J. H. " *Determination of the Exact Size and Orientation of the Great Pyramid of Gizeh.*"

Garnier, Col. John :

The Great Pyramid : Its Builder and its Prophecy.

Brooke, M. W. H. Lombe :

The Great Pyramid of Gizeh : Its Riddle Read.

Edgar, John and Morton :

Great Pyramid Passages (Vol. I, 1910).

Great Pyramid Passages (Vol. II, 1913).

Davidson and Aldersmith :

The Great Pyramid : Its Divine Message (1924).

Davidson, David :

Talks on the Great Pyramid.

Nos. 1 to 4 (1924—1926).

Early Egypt, Babylonia and Central Asia (1927).

Prophecy and the Great Pyramid's Scientific Revelation.

Reprint of two series of articles in *the Morning Post* (1927 and 1928).

Stewart, Basil :

The Witness of the Great Pyramid (2nd Edit., 1928).

The Great Pyramid, Its Construction, Symbolism and Chronology (2nd Edit., revised).

Breasted, Professor James :

Ancient Records, Vol. I.—*A History of Egypt* (1905).

Hall H. R.

The Ancient History of the Near East (1913).

Cambridge Ancient History, Vol. I. (1923).

Weigall, Arthur :—*A History of the Pharaohs*, Vol. I., 1925.

ACCESSORY WORKS.

Budge, Sir, E. A. Wallis :—*The Book of the Dead* (Introduction) 1909.

The Book of the Kings, Vol. I (1908). *The Gods of the Egyptians* (2 Vols. 1904.)

Osiris and the Egyptian Resurrection. (2 Vols.)

Breasted, Professor James : *Development of Religion and Thought in Ancient Egypt*.

Petrie, Sir W. M. Flinders :

Descriptive Sociology (Section—*Religious Ideas*).

Waddell, Professor L. A. :

The Phœnician Origin of Britons, Scots and Anglo-Saxons (1924).

MACHINE GUNS IN THE ATTACK.

DEAR SIR,

The inclusion in the organization of a battalion of a machine gun company has given rise to various problems, of which the most pressing is for obvious reasons, the question of transporting the extra material involved. Various solutions have been put forward, and several methods have been tried, or are under trial. But before any opinion can be formed as to their efficacy, it is necessary to be quite clear in our minds as to the conditions under, and circumstances in, which the method of transportation is required to be utilized. It is considered that a method of transportation which suits the tactical handling of this weapon in the attack will adapt itself to every form of operation, and we will therefore examine the matter from that aspect only.

The duties of machine guns in the attack are laid down in our manuals. While it is of little use to cavil at the actual wording of the book, it is nevertheless essential that the meaning underlying that wording should be sufficiently clear to the ordinary mind, and more important still, that it should convey broadly the precepts which must be followed to ensure the correct application of tried principles.

Before discussing the duties of machine guns in the attack, it might here be as well to remove the misconception that the attack, speaking from a machine gun point of view, is a movement against an enemy in position. If we give the enemy credit for having retained

his power of manoeuvre ; if we visualize our forward movements as being against an enemy who will either draw back or move forward to the encounter ; if, in fact, we efface France and come out into the open ; then it may be possible to picture what we require of our machine guns. When this picture is clear in our minds, by a consideration of the capabilities of the weapon with the requirements we have evolved, we arrive at its duties.

The first duty now laid down is that of supporting the infantry by fire throughout every stage of the attack. This continuous support is only possible by overhead or flanking fire. Without going into technical details, overhead fire, even if it can be regarded as a practicable proposition, ceases to assist the infantry at the most critical moments in their forward movement, *viz.* : when the opposing sides are in relatively close contact. In point of fact, visibility under modern conditions, the human element, and a variety of minor reasons, rules this method of support completely out of any picture (except one, possibly, that portrays the rugged hills of the frontier). There remains flanking fire, which can only be applied under certain conditions. It requires a co-ordinated fire-plan—brigaded guns—visibility, suitable ground, and so on. Following our process, therefore, of reconciling requirements with capabilities, we can now delete the words “throughout every stage,” and evolve as the machine guns first duty that of “supporting the infantry by fire.”

Now that the duties of machine guns in the attack have been brought within the bounds of possibility, we will consider how they can be carried out. The first duty, which we have revised, tends to draw the guns away to a flank. Here they automatically fulfil their second task of flank protection, and, to a certain extent, of filling gaps. But the third task, in particular that of forming rallying points, is now somewhat beyond them. We have therefore either to choose between the relative importance of the tasks, or to allot specific guns for each.

Whatever may be said to the contrary, the machine gun is primarily a defensive weapon. It may be extremely offensive in its movements, but in its action it is essentially defensive. To come within the “offensive” category, it has to transform itself into a tank. We may therefore take it that its main uses are derived from its defensive capabilities.

To clarify the argument, we will now rearrange the duties of machine guns in the attack. These we have endeavoured to show are :—

- (1) to deal with counter-attacks and to form rallying-points ;
- (2) to support the infantry by fire, and to watch the flanks.

These appear to cover the main tasks. There remains the “ reserve of fire-power,” which is more in the nature of a statement of fact, in the event of guns being held in reserve.

Now, how are these duties to be performed ? (1) necessitates forward guns with battalions ; (2) necessitates brigaded guns on the flanks. It is therefore clear that leading battalions will have to retain a portion of their guns, and that the remainder will take on the second rôle. All sections will therefore have at times to move close behind the forward infantry. While doing so they will fire only in emergencies. Their task begins when ground is won. They must be able to traverse any country, and need not necessarily have all their ammunition up with them. Pack transport being the only solution at present, the twelve guns and their immediate ammunition needs must be carried on twenty-four mules.

The second rôle involves expenditure of ammunition, but is possible of execution from less exposed positions. The two mules per gun will give sufficient mobility to meet temporary needs after a cap-frog, and the reserves of ammunition, carried on A. T. carts, and later mechanical carriers, can be diverted to the brigaded guns as required. Broadly, therefore, our organization must be :—

1st Echelon.—Pack mules, with sufficient ammunition to last out an ordinary battle.

2nd Echelon.—Vehicles, forming a general reserve for the machine gun company.

Diagrams I and II show a suggested distribution of guns in the attack, and diagram III is a rough illustration of the ammunition supply.

INDIRECT-FIRE.

Another problem which will face us in the new organization is the training of sufficient personnel, and the maintenance of the high standard of efficiency which machine-gunnery demands. Even under present conditions, this is a matter of extreme difficulty ; and under war conditions our machine-gunners will—to state the case mildly—be a cause of anxiety. The easiest remedy to this undesirable state of

affairs is to simplify the training necessary for the efficient employment of the gun. But it would appear that the tendency of all treatise on machine guns is now to complicate their use ; and it is questionable whether the experts have not strayed from the limits of practical politics into the realms of fancy.

Direct fire is the normal, and a state of perfection is essential before considering anything else. Having acquired that perfection, it is necessary to maintain it ; and further, in present circumstances, to cater for the abnormal when only indirect fire is possible. If we can do this latter without detriment to our direct-fire efficiency, by all means let us do so. But everything tends to prove the task impossible.

There are several methods of applying indirect fire, some being exceedingly simple, others highly technical and involving the use of expensive instruments. All methods are taught, and the more complicated ones consume time out of all proportion to their importance. In point of fact, the times when indirect fire can be advantageously employed in war, are extremely rare. Night, and the interference with visibility which may be expected on a modern battle-field will, of course, give periods of blind firing along pre-arranged lines ; but firing in daylight from behind a modicum of cover, for which all this extra training is required, is surely false economy.

Let us consider the question more closely. The advantage of firing indirectly is a certain amount of cover from ground—not *AIR*—observation. This also gives a sense of security from fire, which is in reality false. The disadvantages are that it reduces the fire effect to a considerable degree by converting the firers into machines and rendering the application of fire unintelligent ; that it creates dead ground in front of the guns and makes the engaging of fleeting targets impossible ; that it tends to collect the guns into a position where one shell, air-directed, will obliterate the lot ; and that it is in practice generally unworkable. Time after time, we see sections adopt indirect fire positions, go through all the formalities, and then move forward as they cannot clear the crest. In fact, in many cases, after a great deal of movement, the guns are dragged forward until they are actually merely in a very bad direct-fire position. Again, in many cases where a suitable crest-line, combined with an element of luck, have allowed the guns to fire, an unexpected target on the flank or a correction “down” results in a complete cessation of fire.

The argument against this may be that indirect-fire is the result of war experience. But in the war of the future, time will be the essential factor, and we cannot afford to waste it to gain the one advantage mentioned above. In an organized defensive position, where the relative value of time is not so great, our preparations may be more thorough; but there ought never to be any necessity for deliberately taking away the sight from the guns.

Let us therefore make the gun a direct-fire weapon. We may get more casualties, but we will do our job. Let us train our sections so that they are experts in direct-fire. Let us discard the director and the field-plotter and apply the saving so effected to essentials. Let us, in fact, train for war, and not for the production of spectacular display.

Yours faithfully,

L. W. McKAY FORBES, CAPT.

Distribution of 12 Secs. of Bde. in attack.

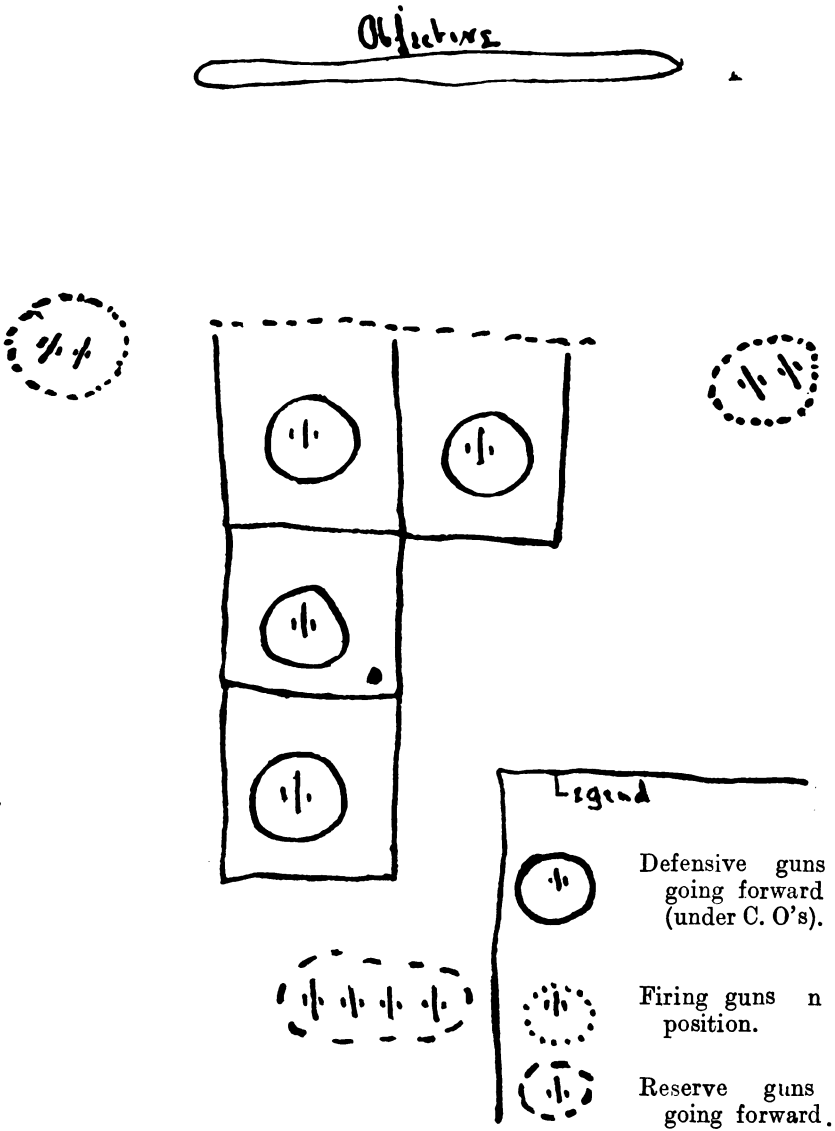
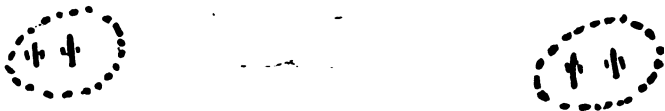
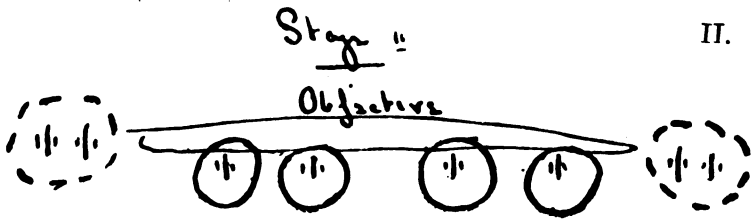
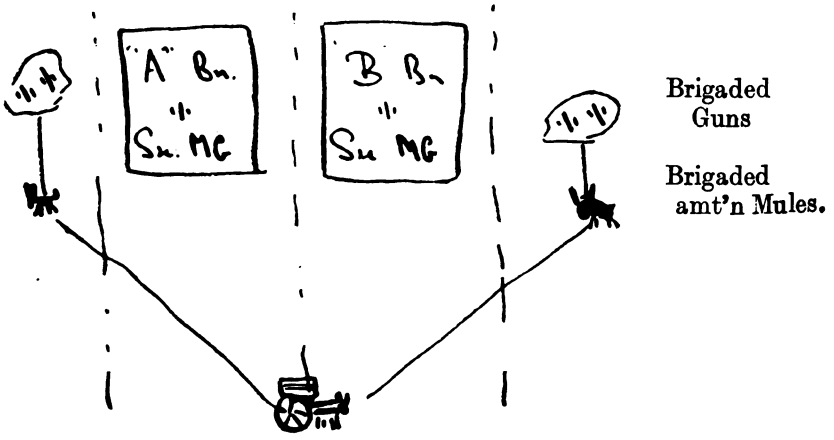


Diagram 1.



Enemy

III.



Brigaded amt'n Carts.

Reserve Guns not shown.

SOME NOTES ON AIR MATTERS AFFECTING INDIA.

SIR,

Relying on the hope that in bursting into print he invites criticism, I venture to offer a few comments on Squadron Leader Hodso's article in the July number of the Journal, entitled "Some notes on Air matters affecting India."

As a student of military geography and one with an enthusiastic regard for the reputation of the Journal of the U. S. I. of India, I feel constrained to call attention to what I submit are grave inaccuracies in the article to which I refer.

To say that "the Mediterranean has, in fact, become the cockpit of Europe" is an over-statement. Great Britain, France and Italy are the principal Powers interested in that sea. Spain's interest is limited by her lack of military power. Russia is prevented by the interposition of the Dardanelles, Turkey and Greece are minor powers and the influence of other European nations in the Mediterranean is non-existent or negligible.

The author of the article attempts to frighten us with pictures of French and Italian aircraft exercising *command* (sic) over the Mediterranean. Surely he does not seriously ask us to believe that an air force can *command* anything? An aeroplane might frighten and it might reconnoitre. It might even discharge a magazine full of cartridges or even drop a torpedo, but the effectiveness of these measures depends on accuracy of aim and other military qualities on the part both of the attacker and the attacked. I suggest that the British Empire would have much more reason to fear enemy submarines than the clouds of aeroplanes we are invited to contemplate. Incidentally this part of the article appears to postulate an attitude of complete inactivity or at least a position of inferiority on the part of the British Navy and the Naval Air Services in the Mediterranean.

Granted that the capacity of airships will improve it surely is fantastic to suggest that aircraft will ever be able to compete with sea-borne vessels in the matter of weight carrying capacity or cost? A transport can carry over a thousand troops; an airship capable of transporting the same number with stores and baggage is a long way from realisation and its cost would be prohibitive.

The statement that India's military expenditure is a "vast burden" is pure journalese and worthy of the best traditions of the vernacular press. Whether statistics are based on population, area to be defend-

ed, or on comparison with other countries, it can definitely be proved that India's expenditure on defence is by no means vast. The Army in India comprises 1/1 600th of her population ; that of France is 1/60th ; Japan, an island power in no fear of invasion, spends twice as much as India on her military budget. The U. S. A. with no enemies, spends six times as much. India spends Rs. 2 per head of population, Japan Rs. 20, the U. S. A. Rs. 40. Great Britain, responsible for the reinforcement of India as well as other parts of the Empire, spends Rs. 50 per head of her population. The adjective " vast " is a relative term to be used with caution.

The author also states that India has " no very great naval danger to face." If the British navy were non-existent and the British Empire ceased to hold the gateways into the Indian Ocean, does he suggest that India, with her annual seaborne trade amounting in value to some 450 crores of rupees would be in no peril from the first naval power able to arrive in the Indian Ocean ?

Complacently ignoring the true facts, Squadron Leader Hodson makes certain claims for the so-called Air Force defence of Iraq. Control of a country which is not attacked, can be carried out by an unarmed police force. If Iraq were to be invaded, or if armed rebellion on a large scale broke out, all the R. A. F. could do would be to shriek for help. The same applies to the Air Force *control* of Aden. Admitting that the first duty of the British Imperial Forces is " to maintain law and order and to repel any attempts at external aggression or encroachment " it seems obvious that the true function of the R. A. F. is one of co-operation with the senior services and that by itself it is no more than a " burglar alarm." The R. A. F. could not even stay in Aden if the British navy were unable to guarantee immunity from attack by sea and the local levies ceased to protect from attack by land.

The author's expression, " hardy liver " in discussing the North West Frontier, is capable of more than one definition, but when he suggests that the Pathan is pugnacious because his mountainous environment makes him so, he misses the point.

The prime reasons for the Pathan's pugnacity and propensity for raiding were poverty and hunger. Secondly, there have been no raids since 1925 and thirdly, if I understand it aright, the policy of the Government of India is to relieve the tribesman of any desire for the dangerous and not always remunerative sport of raiding by providing

him with employment on or in connection with the roads. When "wild and warlike people" are themselves employed on building roads through their own country, where is the necessity for protecting the road builders? The local protection to which Squadron Leader Hodson refers consists of tribal *khassadars* backed up by Scouts who are tribesmen from other parts of the Frontier. The mobile garrison to which he refers takes no part in the "pacification" (*sic*) of the North West Frontier unless specifically called upon to do so by the Civil Power. It is probably a truer and no more dangerous generalisation to say that the role of the troops in the North West Frontier is to protect the inhabitants from external aggression, or that their presence there is due to the suitability of the ground for training.

Granted that "the Air Force has its uses" it is equally true that the necessity for punitive action on the N. W. F. is rapidly disappearing while it has by no means been proved to the logical mind that independent Air Force action is the quickest and most economical way of dealing with disturbance.

As a "nipper of buds," as a means of reconnaissance, or as a "burglar alarm" the Air Force can be admirable, but it could no more hold the North West Frontier of India than the Navy could capture the Dardanelles.

Squadron Leader Hodson concludes with a pious belief that "there will be scope for an extended system of air control (*sic*) in Burma and on the N. E. Frontier. He admits that "the country is covered with dense vegetation and observation from the air is liable to be very restricted." Does he propose to control the tree tops or the people under them? It is pertinent to enquire how the gallant Squadron Leader proposes to control that which he cannot see?

Finally, when one realises the financial difficulties with which the armed forces in India have to cope, the suggestion to cover Burmese swamp with tarmac is comic.

Yours faithfully,

R. J. WILKINSON, MAJOR,

2nd Bombay Pioneers.

THE JOURNAL OF THE SOCIETY OF ARMY HISTORICAL RESEARCH.

Sir,

A passage at page 691 of the July number of the Journal may lead to misconception.

Units and messes, as well as individuals, may join the Society of Army Historical Research and thus receive its Journal. At present few Indian Army messes are members, however, and this can only be due to lack of knowledge of its wide interest.

Yours faithfully,

H. BULLOCK,

CAPTAIN.

REVIEWS.

NATIONAL POLICY AND NAVAL STRENGTH AND OTHER
ESSAYS.

By

VICE-ADMIRAL SIR W. H. RICHMOND, K.C.B.

(Sir Isaac Pitman Sons, & Ltd., London) 1928. 25s.

Vice-Admiral Richmond was the first commandant of the newly created Imperial Defence College and is the author of a number of articles on sea warfare generally ; any book from his pen is therefore worthy of the careful study of all students, not only of naval warfare, but of warfare and military history generally. He does not confine himself solely to sea matters, though naturally these predominate, but he writes also on matters affecting all three services and matters of interest to all who wish to extend their knowledge of matters of Imperial interest.

In the book under review, the author has collected a number of writings published from time to time and varying in subject from French Corsairs to Combined Strategy ; in a collection which are all of interest it is difficult to pick out ones for special comment ; those of more general interest have however been selected in preference to those of purely naval concern.

The article with which the book opens is the " Raleigh " lecture on history and is worth the study of anyone who is interested in the growth of sea power and the Empire. The author has traced out, between the sixteenth and twentieth centuries, the policy which governed the strength at sea and how successive British parliaments have actually dictated or influenced its course. The doctrine of sea power was actually first formulated in the fifteenth century, but was reinterpreted by the Elizabethians and invested with an infinitely wider scope than the " Narrow Seas " which were originally visualised as alone being of importance to England.

The aim of this paper has been to trace out the gradual realization by the British people of the necessity for attaining and retaining command of the sea and it is to Raleigh, perhaps, more than anyone else that this new doctrine became what one may best describe as one of the ten commandments of British policy. The alliances and manœuvres which successive British Governments em-

ployed in fostering this policy are briefly traced—the anxiety which the Dutch caused us at various times, the defeats of the Spaniards and so on. It is of special interest to note the part played by the “Maritime Rights” in this development and to note the vigour with which the various Governments were prepared to defend these arbitrary rules which had been laid down.

The next article of special interest is one on Combined Strategy. The author has dealt with this subject on the lines of what he calls “Grand Strategy”—the strategy which is concerned with the planning of war in which the co-operation of all the forces which make up the strength of the Empire are essential if proper advantage is to be taken of the whole national strength.

This study is begun, rightly, by an explanation of the inter-dependence of all the fighting forces on one another: the author, being a sailor, is at much pains to point out that the main problem is one of maintenance and that in every case maintenance depends on the merchant service and on the power of the Royal Navy to protect the trade routes. A doctrine often forgotten, but very true and he might have added a corollary in regard to the power of the Air Force to interrupt merchant shipping. Combined strategy also includes such diverse subjects as finance, geography, manufacturing skill and productivity.

The main difficulty is that diverse views are and always have been held on the theory of war and the best employment of the nations’ forces. In the “World’s Crisis,” Mr. Winston Churchill states “Why should the view be limited to the theatre in which the best and largest armies happen to face each other? Sea-power, railway communications, foreign policy, present means of finding new flanks outside the range of deadlock.” And in this quotation lies a problem which has been argued by successions of statesmen and politicians for some 200 years.

The author next proceeds to give his definitions of the various kinds of war with which the Empire is likely to be confronted and then touches on the history of the development of combined action between the services: finally in his conclusion he states that he has used examples to show that “even when we had 2 fighting services there was a difference of opinion as to how they should be employed” and he goes on to say that “though one doctrine usually prevailed, the efforts to attain the object—Victory—on the lines of that doctrine were

definitely weakened by concessions to the other : that the existence of two doctrines led in fact, to our committing the fundamental strategical error of conducting simultaneously what were intended to be two decisive offensives."

A long and extremely interesting article is given on "Considerations of the War at Sea ;" though this is mainly of interest to sailors there is much matter in it which the members of the other services should know, especially if they are on the Staff. We quote one or two extracts to illustrate this. The strategical function of the navy, for instance, is very ably defined and is of great importance : " The first thing to be assured is the security of the passage of the troops employed in the vital campaign. Next, the slower but severe pressure produced by cutting off trade. We should therefore expect to find that the preliminary dispositions of the fleet would be calculated to bring these offensive operations into play at the earliest moment. The navy cannot however maintain the army unless at the same time it maintains the home country itself. . . . and thus it was not only of importance to protect the troops and their immediate requirements, but also to protect the raw materials from their source of origin until they reached, in their final form, their destinations in the theatre of war or in the bellies and on the backs of the people at home who were supporting the war by their labour." The place of raiders, the submarine campaign and how it was countered and many other aspects and problems which faced the German and British naval commanders in the Great War, are dealt with and the article is strongly recommended to all students of war.

A short and valuable study of Co-operation is given and this is a subject on which perhaps, more lip-service and less real action is given. As the author so aptly says " Therefore, as a first step towards co-operation, let us be sure of the purpose. We are then able to think what form of weapon—army, navy or air force—is best adapted to attain it, and the degree to which assistance of the other services is essential." Various historical examples of good and bad co-operation are given, including perhaps, the most famous example of really good co-operation : we refer to that given by Nelson and Jervis to Beaulieu, the Austrian general, on the Riveria in 1796.

Other articles of interest are on " Informing Subordinates," giving examples of the ill-effects of keeping officers intimately concerned with some operation in ignorance of the object which the commander

is trying to attain ; on the advisability of allowing free thought and discussion in the service, with a special plea for the navy ; on the use of history in learning the art of war ; on battle cruisers—their value as brought out by the war. This article is of particular interest in that it shows that, in the author's opinion, the battle cruiser was a great mistake and that if we had not started it the Germans would not have done so too and that the money would have been very much better employed in building light cruisers. This is admittedly a controversial subject, but we must admit that the author has given a very convincing case against this particular type of vessel.

Finally the book ends with two lectures delivered at Cambridge on Sea-power and the Empire. Both are of absorbing interest and of great use to students and staff officers.

We can thoroughly recommend this volume of essays, which besides containing matters of much moment are written in a straightforward and fluent style.

THE OFFICIAL HISTORY OF AUSTRALIA IN THE WAR OF 1914-1918.

VOLUME IX.

THE ROYAL AUSTRALIAN NAVY.

(*Messrs. Angus & Robertson Ltd., Sydney*) 1928, 21s.

(By Arthur W. Jose. Published by Angus & Robertson Ltd. Obtainable in Great Britain at the British Australian Book Store, 51 High Holborn, London, W. C. 1. ; the bookstall in the Central Hall of Australia House, Strand, W. C., and from all other booksellers).

We none of us need reminding of the part played by Australia's land forces in the Great War. We do need reminding of Australia's services on the seas, not because her navy played the lesser part, but because that part was necessarily less spectacular and individual. Pitched naval battles were few and far between, while after the first six months of the war the ships of the Australian Navy ceased to act in a single unit under a single command, and were absorbed into the various squadrons of the Royal Navy directly under Admiralty control.

This volume, the ninth of Australia's Official War History, provides us with just the reminder we need. Commencing with an

introduction, which traces briefly the growth of the Royal Australian Navy from a 580 ton armed screw-steamer in 1856, to a squadron of 16 vessels in 1914, it goes on to record the incessant activities of that force, increased to 23 vessels by 1918, throughout the war.

It is to the Australian Navy that credit is due for the capture of the German colonies of Samoa, Nauru, and German New Guinea. We learn here of their work in the Pacific, and in particular of their contribution towards the victory of the Falkland Islands. We are reminded that it was one of their ships which rid us of the "Emden." Finally we are given a close insight into Australia's share in that continuous patrolling and convoying, which was such an onerous, if inconspicuous, part of our Navy's rôle in the war. All this in a volume rich in illustrations, maps, diagrams and appendices.

"SHIKAR."

"BEING TALES TOLD BY A SPORTSMAN IN INDIA."

By

LT.-COL. C. H. STOCKLEY, D.S.O., O.B.E., M.C., F.R.G.S., F.Z.S.
(Oxford University Press, Bombay, 1928), 12s.

In this book, Col. Stockley takes his readers with him on a series of shikar trips mostly in India.

He makes his reader experience again all the little incidents that go to make up even "the journey there." The long tonga drive with jibbing ponies, the forest bungalow, the sounds of the jungle, even the roo-coo-roo of the doves, so cleverly does he suggest the sights, sounds and smells which all of us know so well.

In his description of his expedition in the Kishtwar District of Kashmir, Col. Stockley enables his reader not only to see the glorious landscape but also the Kashmiri Doongah, the glittering snow fields, the roaring torrents, and the crazy rope bridges.

It is this wonderful gift for making his reader see with him that makes the actual shikar of such living interest and enables the reader to visualise just how the animal is standing, what exactly the stalk entails, and almost hear the rolling echoes in the gorges as the shot is fired, and feel the disappointment as the fine old buck leaps for safety and vanishes.

The book does not offer the novice any direct instruction on the subject of shikar ; but to accompany an experienced shikari through every incident of a series of trips of the sort described, to appreciate with him the difficulties and how they were got over ; to experience the patient hours of spying with fieldglasses and telescope, to see the conclusions drawn and the resulting plans ; is of absorbing interest and inestimable value.

As regards scope, the book deals mainly with the shooting of tahr, ibex, gaur, markhor, kudu, burrhal and orial ; and the expeditions described are, for the most part, in the highlands of Kashmir, Ladakh, Sind, Kalabagh, the Nilgiris and Somaliland.

One trip to the forests of Upper Burma after tsine (the wild ox of Burma) deals, however, with the thrilling business of tracking dangerous game.

In the course of the book a great number of animals are met with, ranging from bear *via* birds to shikaris.

The book is beautifully illustrated and is one that no one who cares for the open spaces should fail to read.

MAP READING FOR BEGINNERS.

By

MAJOR N. M. CARRUTHERS.

(*The Civil and Military Gazette, Lahore*), 1928, Rs. 1-8-0.

The author's object is to " fill a gap in the official and other books on Map Reading." He elaborates Chapters V, VI and VII of the " Manual of Map Reading and Field Sketching, 1921 " and concentrates on the interpretation of contours.

Slowly and simply, with the aid of numerous diagrams, he makes quite clear how to appreciate slopes and gradients and solve questions of visibility. In a way he succeeds well in attaining his object.

To be critical one might enquire whether the " Manual of Map Reading and Field Sketching " and " Notes on Map Reading, 1925 " are not sufficiently clear.

Major Carruthers' work will be of most value to officers and N.-C. O's. who find difficulty in imparting instruction in map reading.

THE TIMES WAR GRAVES NUMBER. NOVEMBER 1928. 2d.

The Times have published a War Graves Number, dated Saturday, November 10th, to commemorate the 10th anniversary of the signing of the Armistice.

This special number contains several excellent articles, including one by the Prince of Wales, and some very good illustrations which help to give some idea of the tremendous task which the War Graves Commission has undertaken so efficiently.

This special number should be read by everyone and can be obtained from any newsagents at the small cost of two pence.



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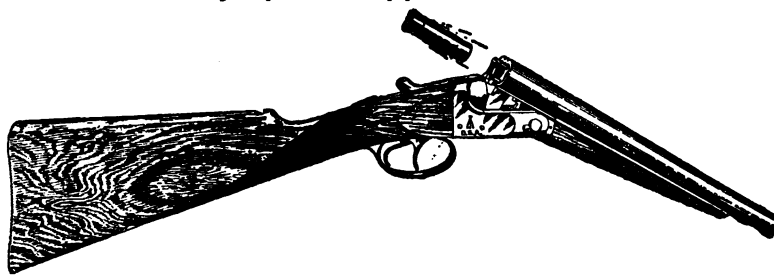
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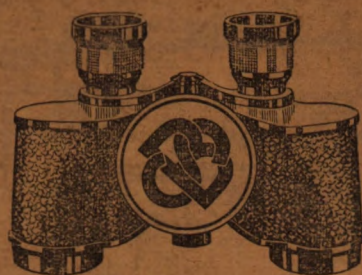
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